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Side Glances—

THE speech and reading clinic that serves the 800 children in the laboratory school of Indiana State Teachers College emerges as an integral part of a teacher education program. Olis G. Jamison and D. W. Morris will describe the threefold program of clinical and instructional work in remedial speech and reading next month.

"AN EDITOR Complains About the English of Educators" is the title Carroll Atkinson of New Jersey State Teachers College has given another good article on the August schedule. True, editors have been heard to complain but not more vociferously than does Professor Atkinson, who wants major stress put on good English expression not only in English classes but in all courses.

THE Lighted Schoolhouse has become a symbol of adult education. Next month's special portfolio will cover the lighted schoolhouses of America under the inspired guidance of such enthusiasts for continuing education as Lyman Bryson, Commissioner Studebaker, Frederick S. DeGalan, Alonzo G. Grace, Burton K. Farnsworth, Charles Fisher and company.

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When Walls Need Attention

Whether school walls should be washed or repainted is always a problem. Probably there are few, if any, who can answer specifically the question, "to what extent is it possible to increase illumination by washing soiled paint?" However, given a definite painting schedule that calls for repainting walls at stated intervals, what is to be done about these walls in the interim? A few soiled spots on the wall surface will deflect the even distribution of light.

To Paint—or Wash?

A recent discussion of this subject with W. F. Holzapfel, chief building engineer, board of public education, Wilmington, Del., brought out some interesting ideas. For example, granted that skilled painters are available, it may prove more economical and quicker to repaint the walls than to wash them.

"However," Mr. Holzapfel points out, "our painting schedule calls for the painting of interior walls every eight years. In the meantime a lot of dirt has accumulated. We have been quite successful in washing the walls. I frankly admit we have never taken foot-candle readings on the rooms cleaned, but we have materially increased the distribution of the light throughout the room. Many times, provided the paint was not peeling or damaged, we have washed the walls with the result that they looked as if they had been newly painted. For such work we use members of our regular custodial force and, naturally, it costs much less than repainting."

A good detergent, two stepladders, one plank, two buckets and two sponges will do the trick, Mr. Holzapfel has discovered. In Wilmington they dissolve about 2 tablespoonfuls of the detergent in approximately 12 quarts of water and apply the mixture on the walls with a sponge, using a vertical stroke, starting at the top and working down. Should unusually bad stains, such as grease or pencil marks, be encountered the sponge is dipped into an open container of the detergent and the soiled spot is gently massaged. Following this, the area is washed with a clean sponge and clear water.

Equipment and Methods

The equipment that is needed to clean walls effectively, according to Chester F. Hayford, school janitor, Fessenden, N.D., is as follows: two pails of about 10 quart capacity; clean cloths and brushes; a good neutral cleaner or soap; a ladder, and three clean dust mops, one for dusting the walls before washing, one for washing and one for rinsing.

"Before starting to wash walls," he advises, "be sure you have removed all loose dust and dirt with a dry mop or cloth. Then fill two pails about half full of water. Too much soap is wasteful. Add soap to the water in small amounts

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until the wall feels slippery when a small amount of solution is rubbed on with the fingers. Use a clean cloth with enough water to work nicely without dripping too much on the floor.

"In washing a wall always start at the bottom, using long straight strokes, either up and down or horizontally. This gives an even finish that cannot be obtained with a circular motion. An uneven pressure is created in the circular motion that causes uneven cleaning. If you start at the top the cleaning solution running down on the wall will leave a white streak on the lower wall that will not come off. This is caused by the oxidizing of the paint when the solution is left on it too long.

"After covering about 100 square feet of space, rinse wall, using clean water and a clean cloth. Change the water often. Wipe dry after rinsing. It is well to clean the wall in uniformly sized spaces or portions, so that the cleaning solution will not be left longer on one place than on another.

"Another method is to use a clean dust mop, wring out some of the water in a mop wringer, go over about 200 square feet of space, rinse with another clean dust mop and wipe dry. This method works well and is much faster, particularly on large wall surfaces. A good way to keep the wall bright and to avoid dulling by washing is to add a little water wax to the rinsing water. There also are some good polishes that clean and restore life to a wall if it is not too badly soiled. This is a little harder work than washing a wall.

"Smooth plaster, steel partitions, tile, wood or any painted walls can be washed thus. A float or sand finish plaster wall is difficult to wash because the uneven surface holds the dirty solution. These rough walls can be washed with good results by using a brush that is a little softer than a scrubbing brush. This will get all the dirt out of the rough finish. Use another clean brush for rinsing and turkish toweling or sugar linens for wiping.

"A rough wall can be smoothed by being rubbed with a soft red brick; just enough force or pressure should be exerted to take off the sand or bumps without hurting the wall. After this is done, clean and paint the wall. This makes it much easier to wash and will make the room lighter and more cheerful.

"A 1 per cent solution of phenolphthalein in alcohol can be used to test a soap or cleaner for alkali. A few drops in the soap solution will make it turn red or a pinkish color if alkali is present. Use blue litmus paper to test for acid. The paper turns red if any acid is present. Phenolphthalein and litmus paper can be obtained from any druggist. Neutral soap should be used on painted or varnished walls and an alkali cleaner, on a rubber wainscot or wall."

Use Ingredients With Care

The method employed by Louis M. Randall, business manager of Birmingham public schools, Birmingham, Mich., in washing walls is to use a small amount of trisodium phosphate, or commercial cleaner, vegetable oil soap and a little abrasive powder, depending upon the condition of the walls. He urges caution in the use of trisodium phosphate, however, as too much will remove the paint.

"Ladder jacks and planks are essential," Mr. Randall emphasizes. "Also, two pails, one for the compound and the other for clean water, should be provided for each operator. We find form sponges most effective for the application of both the compound and the rinse. We apply the solution to a space perhaps 4 feet long and immediately go back over the surface with the rinse, always rubbing one way so as not to leave streaks. When walls and ceilings are washed frequently vegetable oil soap will do the work, but the trisodium or its equivalent in a commercial cleanser must be used on badly soiled surfaces."

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LOOKING FORWARD

Selective Service

WHEN we looked at the World War in retrospect, with its picture of simpering females who walked up and down our city streets pinning white feathers on the lapels of men who were not in military service and making exhibitional nuisances of themselves, we were extremely enthusiastic about the attempt to establish an intelligent policy for emergency service during times of peace by the enactment of a Selective Service Act. With some weaknesses that might be corrected by piecemeal amendment, the 1940 act seemed to meet the needs.

Preparation for war or waging war itself demands total national effort today. The sharp differences between civilian and soldier have disappeared. Everyone must serve and everyone must suffer. Total war means that for every man in front-line service there must be immediate, intermediate and back-line support by at least 25 individuals. These individuals raise the food, produce the raw material and attend to its processing and distribution. Since war is only an undersirable and expensive episode in the total life of the nation, provision must constantly be made for long-range planning so that the nation will be prepared to carry on with the least possible economic and social dislocation after the war.

Modern warfare has taken the glamour and romance out of front-line service. Present indications are that those who serve behind the lines, in mine, forest, farm and factory, make as great a contribution and suffer just as heavily as the active service units. If, as it now appears, we must maintain a policy of general preparedness after the present war, in which each individual will receive some general training for possible future service, it should be possible to organize this service so that it will contribute to the total general welfare rather than act as a handicapping influence.

With these needs in mind, we cannot look at the current administration of the Selective Service Act with the enthusiasm felt at its inception. Men who are rearing families and are just well started in their careers and others who are well along toward the 35 year age group have been sent into active training when they might better serve behind the lines. Students preparing for the essential professions of architecture, dentistry, engineering, medicine, pharmacy and teaching are having their courses interrupted, in some cases disastrously, by being sent to camp. Shortages in professional skills cannot be overcome on thirty days' notice! The nation needs technological and social skills to safeguard its future in a highly competitive world.

These practices seem unnecessary when one considers that practically all of the major educational institutions are already equipped with departments of military science and tactics that operate during the year and might also work during the summer vacation period. Intelligent administration of the Selective Service Act would attempt to do two things: stimulate the pursuit of essential professional work and, at the same time, provide for essential military training.

The Army authorities may say that the responsibility of making case decisions rests with the local draft boards. Since the adult public has not been educated to the full meaning of selective service, however, the local draft boards are naturally timid about making decisions of this nature. There is current need for a general policy that would make it necessary for the civilian draft boards to exercise greater intelligence in classification.

The Selective Service Act can be constructively administered to make the United States strong in defense and even stronger for the peaceful days to come. It may become a serious handicap if the fundamentally sound principle of truly selective service is lost in a maze of inelastic and short-visioned bureaucratic procedure. The Army needs to streamline both its thinking and its practice.

Fred A. Jeffers

THE superintendent's job is considered so precarious that it is news when a man completes fifty years of service within a single school system. Half a century ago Fred A. Jeffers accepted the superintendency of the Painesdale schools (Adams Township) in the upper peninsula of Michigan. Today, at the age of 72, he is still actively pursuing his duties with a degree of open-mindedness, intellectual curi-

osity and energy that would be remarkable in a man half his age.

What manner of man is this who can maintain himself as superintendent in the same community for half a century? The story is worth telling.

Fred A. Jeffers was born on a farm in Jackson County, Michigan, in 1869, attended a one room school and was graduated from a small high school in the same county at the age of 17. Some of his teachers captured the imagination of this growing boy so that the great American dream became to him a living religion. He felt that he was "called" to spread the democratic gospel through teaching.

After leaving high school, Mr. Jeffers taught for a year in a rural school and then entered Michigan State Normal College at Ypsilanti for two years of training. From this midwestern center of classic tradition he went to the superintendency at Painesdale, which is now the secondary school center of the Adams Township district. Several years later he married one of the teachers he had chosen earlier for a position in these schools. Mrs. Jeffers became high school principal, a position she still holds.

Fred A. Jeffers is intensely human. He has always clung tenaciously to the belief that the best teaching is not always done in the regular classroom but, rather, in close personal relations with individual pupils. Long before the teaching profession was discussing it, Fred Jeffers was practicing individualized teaching in his North Country schools. From the mining and frontier communities comprising the Adams district, many men and women have gone forth who have made notable contributions to their community and state.

As the years passed, Fred A. Jeffers came to be accepted as the home town philosopher, the wise counselor, the friend of man. Under the wise social direction of Fred and Lola Jeffers the community was kept just a little ahead of the schools. As the second and third generations of children came into the schools, the old gray schoolmaster became almost a sacred symbol.

Mr. Jeffers' popularity forced him into public life. He served as member of the state board of education from 1915 until 1933. He was elected president of local and state education associations. Both Michigan State Normal College and the University of Michigan recognized his work by granting him honorary degrees. His people even wanted to send him to Congress after the World War, but Jeffers demurred. That was different. It would take him from his boys and girls and he would not be happy. He was only a teacher.

So great was community confidence in his fairness and honesty that during the bitter mining strikes the gray-haired schoolmaster walked bareheaded between the entrenched miners on one hand and the operators on the other. No guns spoke as he crossed and recrossed this no man's land as the emissary of peace.

Fred A. Jeffers believes with all the force of his being in the equality of men and the dignity of labor. He is equally at home in mining camp, shack or mansion. Like many of his generation, his natural gift of oratory has been greatly enhanced through long practice. Once when we were discussing the long hard winters of this copper country with a native, he said, "You're wrong, of course, about these winters. You forget Jeffers. When he speaks, the snow melts and the birds sing in the trees. Winter fades before his power of words—and then we walk home in sub-zero weather."

His hobbies are reading American biography and poetry, keeping up with new educational practices during the summer vacation, reading Civil War history, dancing and being generally helpful to young teachers.

We recall traveling over southern battlefields with him. The "barker" was describing a battle scene in the dull and inaccurate language of one to whom the familiar words have long since lost significance. Fred became restive. Finally, he could contain himself no longer. As he spoke, we saw again the men in gray waiting on the heights and the men in blue crawling painfully hand over hand along precipitous slopes at night. We heard the roar of battle and the clash of man against man. The "barker" listened with open mouth. After Fred had finished, he said, "Geez, the general knows his stuff!"

Fred is against any legal retirement age. He believes that some men are dead at 40 while others never die. They are always young until some day they travel quietly to Hiawatha's "land of the hereafter." He looks good for another twenty years of active service himself and the community hopes it will be true!

Improvement

THE revised code of ethics for teachers prepared by a committee of the National Education Association, under the chairmanship of W. P. King, for submission to the 1941 convention at Boston deserves hearty commendation. Of special significance is the provision for a permanent commission on ethics to "study and take appropriate action on cases of violation of this code. . . ." The commission is also vested with the authority to expel a member for violations of the code. When individual states already have code commissions the national commission will refer cases to them for study and action.

One of the distinguishing marks of a profession is the acceptance of social responsibility for the conduct of its members, and the formation of this code commission on the part of teachers marks a distinct advance in professional consciousness.

Another step forward is the creation of a single code of ethics for "all persons directly engaged in educational work, whether in a teaching, administrative or supervisory capacity." We have preached the elimination of the double standard of professional ethics in these columns for many years. The integration of all types of specialized service within the teaching pattern will promote professional unity. The committee is to be congratulated upon its effective work.

Rejections Expected

ALTHOUGH there has been considerable publicity regarding the number of men who have been rejected on physical grounds, the draft experience in the current emergency is still too fragmentary to permit of drawing final conclusions regarding the state of health of the group that is included in the universal service act. Despite this fact, individuals and groups have not been hesitant about viewing total conditions with alarm and blaming home, school and health authorities indiscriminately for the deficiencies. Remedies advanced have included everything from general social feeding to extended physical exercise programs, work camps and special "hardening programs" for all.

A tendency exists to confuse a series of unrelated factors. Individuals may be perfectly healthy in the sense that they are relatively free from handicapping disease and able to withstand the strain of a speeded-up economic and social life and yet be ineligible for more exacting physical service in the Air Corps, Navy or Army. These services arbitrarily demand physical perfection with respect to special neural, mental and physical qualities that ordinary civilian activity does not require. The most exacting examination is that of the Air Corps. The standards are so high in terms of certain special abilities that rejections appear abnormally high. The Navy examination is much more exacting than that of the Army. All of these service standards are being constantly revised and the whole emphasis is upward.

Illustrative of this fact is the experience of a certain highly accredited military school that provides senior R.O.T.C. training. The youths who are accepted for enrollment come from most favored environments. They have never been hungry and from birth have received the best of medical and physical care. Under the military requirements that were in force prior to 1939, the physical rejections by years ranged from 2 to 5½ per cent. This unusually low rejection rate may have been due in part to careless examination but, in any case, since 1939 the same high selections show a rejection rate of 12 per cent. Under the most favorable conditions for youth in terms of exceptional environmental advantages made possible by favored economic position, 12 of every 100 cannot qualify under army standards!

If a cross-section of the entire population were analyzed on the basis of national service standards, one might assume a normal rejection of at least 30 per cent on grounds of low mentality, mental instability, cardiac weaknesses, orthopedic deficiencies, venereal diseases, poor eyesight, deficient hearing, poor teeth and tuberculosis.

In an analysis of rejections by causes to date, Dr. Frederick F. Russell, Harvard Medical School, makes the following percentage distribution: defects in bones, 40; ear, eye, nose and throat diseases, 12; diseases of the heart and blood vessels, 10; nervous and mental diseases, 6; venereal diseases and tuberculosis, each 5. The remaining 22 per cent has been classified as miscellaneous.

More recently, Dr. George Canby Robinson of the Millbrook Foundation stated that rejections would reach 40 per cent. Probably, somewhat more than 40 per cent of the defects listed by Doctor Russell arose from poor diet, bad housing and lack of medical care during infancy and childhood. The greater number of the ailments are not susceptible to remedy by programs of strenuous exercise. They are medical and dietary problems.

While it may be dangerous to generalize upon the fragmentary information now available, it is reasonably clear that the basic cause for service unfitness grows out of physical defects that had their origin, in whole or in part, in insufficient or improper feeding for a considerable period of life.

The problem of attaining physical fitness is primarily one that belongs to the field of social economics and health, a responsibility that must be shared jointly by a group of agencies instead of being borne by the school alone. Physical training, athletics and general recreation appear to be of secondary importance.

Bill of Rights

NO ONE can find fault with Governor Herbert H. Lehman's setting aside a week for the annual celebration of the American Bill of Rights. Its first special observance throughout New York State in which schools, religious organizations, youth associations, civic groups, newspapers and radio cooperated to emphasize the fundamentals of American democracy was a great success. The only question that an innocent bystander might ask is this: If the schools and other community agencies were teaching the dynamics of democratic processes effectively, why would state or nation need a special week to dramatize something that should be constantly in our thoughts and expressed daily in our actions?

The Editor

The Camp as a School

VINSON STROHMAN
Burroughs Newsboys Foundation, Boston

THE camp as school is a concept of progressive education. In the popular imagination the camp exists as a more or less cultivated clearing in the woods where boys rough it for a summer and then return to urban civilization. Some camps, it is true, are nothing more than this but most of them serve a higher purpose. They fulfill the aims of social institutions by promoting the health and happiness of the individual through guidance and instruction. Agassiz Village, the summer community of the Burroughs Newsboys Foundation at West Poland, Me., is a good example.

The philosophy that shapes the program of Agassiz Village has an educational intention, *i.e.* to make explicit the meaning of every service and activity, indeed of nature itself, in the interest of the boy's development. Most of the boys who come to the village are adolescent street traders. They have a good time there and many benefits are conferred upon them. Above all they receive instruction—from the counselors, the hills, the woods, the lake; from the surrounding bird and animal life; from their pleasures, tasks and responsibilities. A thousand voices speak to them and if they cannot hear or understand there are translators to help them. Nothing is taken for granted. Everything is sifted for its educational value and utilized for the furtherance of the boy's body, mind and character.

In this concept of the camp as school the counselor is an integral element. At Agassiz Village he does not have just a job but a creative function, to act as the boy's guardian and teacher. He and the boys are constantly together at joint activities. He is their leader, a person to be emulated; their friend, an object of respect and loyalty. If the boy is homesick, he turns to the counselor for sympathy; if in trouble, he turns to him for help. The counselor interprets the many esoteric meanings implicit in the boy's new surroundings that might otherwise be lost to his inexperienced mind, thus contributing to his development.

Archery is one of the popular sports at Burroughs Newsboys Foundation.

One cannot speak of growth and development apart from self-responsibility. It is not asking too much of the young to require them to be responsible to themselves. The school or camp that fails to make this demand misses the point of character education. The street trade boy, largely owing to the exigencies of his occupation, has a great deal of self-responsibility to begin with and he is given many opportunities to exercise it at the village.

One of these opportunities is village improvement. This activity is carried out every day but Sunday between 8:30 and 10 a.m. Its purpose is to keep the village clean and beautiful. Each boy takes part in it according to his ability. Some rake the roads; others clean up along the waterfront; a few water the flower and vegetable gardens. A sense of neatness and order is the personal consequence and the boys get more out of their vacationland by putting their own efforts into its upkeep.

This same self-reliance enables them to extract greater meaning and advantage from the art and craft classes that the village places at their disposal. The more independent the choice, the happier the result. At Agassiz Village the boys are allowed to go from shop to shop until they find an art or craft that interests them and they are then assisted in it by well-trained instructors. These classes are not only creative outlets but forms of prevocational guidance. In them a boy often finds his vocation or lifelong hobby.

Even the waterfront and athletic activities, sometimes understood as mere exercise and recreation, lend themselves to the educational design. Through them, as their deeper meaning is interpreted by the counselors, the boys learn sportsmanship and consideration for others. For

example, the boys pair off in a so-called "buddy system" when they enter the water, which makes for safety and mutual responsibility. One might note in this connection that the village has an A rating from the American Red Cross and the state of Maine. In all their activities the boys are continually reminded of one thing—fair play! It is important to win, they are told, but more important to give the next fellow a break.

A democratic atmosphere and attitude result from this approach. The camp can teach democracy and Agassiz Village does not overlook the chance. Last summer "democratic rallies" based on the melting-pot idea were held around a campfire in the woods. The boys contributed speeches of their own composition and native songs. This summer the idea will be more fully explored.

Above: The Elizabeth Cary Agassiz dining hall, one of the largest log cabins in the East. Left: Every boy receives a physical examination when he enters the village and when he leaves. Below: A waterwheel, spinning top, motor launch, speedboat, rowboats and canoes constitute the equipment of the camp waterfront.

Of even greater importance is the fact that the boys are given training in self-government through their village government. Every two weeks they elect three selectmen by secret ballot and the selectmen appoint a judge, a district attorney, a sheriff, constables and various commissioners. Every commissioner has a specific function. The road commissioner checks on the condition of the streets and lanes; the cabin commissioner keeps an eye on the cabins; the waterfront commissioner periodically inspects the waterfront and reports on its state. The constables maintain order among the boys. Many ideas that are now incorporated in the village program originated in sessions of the boys' government.

Obviously, despite their self-reliance and opportunities for self-determination, the boys must still depend upon adult guidance for the solution of their normal problems of adolescence. The camp, unhampered by too many formal restrictions, is in an enviable position to provide such guidance. At the village this is done through the personal guidance department in which Harry E. Burroughs, the founder of the Burroughs Newsboys Foundation, takes a lead-

The merry-go-round is a unique feature of the village and is much enjoyed.

ing part. He was a newsboy as a lad and well understands the character of the adolescent street trader. The maladjusted villager, the villager with a problem, is taken for a walk in the woods by a personal guidance man who tries to iron out the boy's problem by talking to him sympathetically and tactfully. Often the peaceful influence of the surroundings helps the boy emotionally. Sometimes, it is lack of money or clothing that bothers him, in which case the village fills the need.

The inspirational possibilities inherent in the position of the camp doctor can also be turned to good account. The camp doctor nearly approaches the type of the country physician in all its implications. He is man, doctor and symbol of excellence. At Agassiz Village, owing to his additional duties as cabin inspector, he comes in daily contact with the boys and is their adviser on all matters.

"Here comes the doctor, the doctor!" That respectful greeting, uttered each morning by several hundred friendly voices, indicates the weight of his authority and the esteem with which he is generally regarded. His presence in the boys' midst lends force to their finest aspirations. The street trade boy is particularly susceptible to persons of distinction.

It is partly for this reason that Mr. Burroughs has prominent persons visit and talk to the boys from time to time. Partly for this reason, too, the cabins, cottages and halls are named after distinguished individuals.

A cabin with an important public name becomes a personality that is both exciting and meaningful. The camp takes advantage of this educational possibility. Instances are the Henry L. Shattuck Town Hall and the Elizabeth Cary Agassiz Hall. The first is named after Henry L. Shattuck, now acting president of Harvard University; the second, after Elizabeth Cary Agassiz, first president of Radcliffe College and grandmother of Maximilian Agassiz, a trustee of the Burroughs Newsboys Foundation. It was Mr. and Mrs. Maximilian Agassiz who made the village possible in 1935. The Henry L. Shattuck Town Hall is the seat of the boys' government and their recreational center. The Elizabeth Cary Agassiz Hall, one of the largest log cabins in the East, is the dining hall.

To speak of this as merely the dining hall, however, is to ignore its higher import. Here, meeting three times a day in an atmosphere of jollity, the boys blend into one harmonious whole. The songs they sing at mealtime are songs of their own composition. The healthy rivalry that ensues between cabins for the neatest table and best order leaves its trace on the character.

A further contribution to their development is made outside the hall every day after dinner through the music appreciation hour during which the boys, stripped to the waist, lie on the grass and listen to a program of classical recordings played on the phonograph.

As most of the villagers are newsboys, some understanding of the newspaper craft may be especially useful to them, and this understanding is provided by *Ye Village Crier*, the boys' weekly paper. To this newspaper each cabin sends its reporter. He covers the cabin and writes stories and items pertaining to it. Reporters at large cover overnight camping trips and village matters of general interest. Boy editors lay out and duplicate the paper and it is mailed to trustees and supporters of the foundation. This training and encouragement in creative expression obviously have great educational merit.

A camp that insists upon instruction, while maintaining its high level of service, utilizes its animal life to develop the boy's character. Animals have much to teach the observant boy. At Agassiz Village there are horses, cows and other domestic animals whose habits the boys study and with which they make friends. There is a certain nobility about their behavior that boys might profitably emulate and this is why the village makes so much of its animal life in relation to the boy.

The final touch to the village as an educational force is the Laura M. Agassiz Library, a charming cabin on a ridge overlooking Lake Thompson, where the boys gather to read and hold discussions. When Mrs. Maximilian Agassiz visits the village she conducts her word-study classes there. The purpose of these classes is to teach the proper usage of words with a view to shaping right conduct and attitudes. In the winter this friend of the street trade boy carries on her word-study program at the foundation's headquarters in Boston.

The camp has passed beyond its pioneering stage of development. Today it is a complex organization with many educational possibilities. These possibilities have only begun to be explored. The camp as school not only gives the boy health and happiness but bridges the gap in his education between the summer and the fall.

The Trouble With Teachers

Faults in Administrative Organization

CHARLES E. GREENE
Superintendent of Schools, Denver

WHY does the American high school so often fail to meet the real needs of boys and girls? Why do high school teachers so often become drab, uninteresting and dissatisfied instead of living lives of creative enterprise that are rich in educational results and pay dividends in personal growth and improvement? The administrative organization of the high school, which has changed little in the last thirty years, is largely to blame.

The traditional program of the high school is patterned after the university departmental system, but it fails to retain the laudable features of the university plan. The school is divided into departments for the convenience of subject matter specialists and the pupil goes from one department to another. However, not only does he lack the maturity necessary for independent action that characterizes the college student, but also he lacks the opportunity to order his own activities and to pursue his own plan and program for filling the gaps and integrating the work that he has studied in the various departments.

Pupils Tied to Schedule

The high school pupil is bound every period of the day; his schedule is made out for him and he must observe it. This schedule makes it difficult for him to relate the experience of one hour with that of the next. His home is so unlike his high school that he seems to have moved from one world into another.

Let us say that he spends the first hour of his school program with an English teacher who has his own peculiarities of personality and his own pet notions of what needs emphasis. At the same time, the teacher is required to follow the course of study that has been framed by some other person or group of persons. The pupil hastens from an English class to a class in industrial arts, where he may work for forty-five minutes on a library table that he has been seeing every day for six weeks and that has been shaping into form so slowly that he has long ceased to take any interest in it.

Then the pupil is taken quickly from the atmosphere of the workshop to a large study hall where an anxious teacher paces up and down the aisles to prevent the passing of notes and where the atmosphere is certainly not conducive to study. Thus, he goes on through the day until, finally, he winds up in the shower room after football practice and is ready to go home to dinner, moving pictures and to bed.

During the period of twenty-four hours he lives in a dozen worlds, each different from the other, with little or no relationship except that some of the classmates that are found in one place are also found in another. The departmental system prevents both the pupil and his teacher from seeing any relationship among the large number of activities that constitute our secondary school program.

The disciplinary system of scheduling the high school pupil every hour under the eye of a watchful teacher prevents him from carrying out his own plans for enlarging his interests in certain fields and activities that appeal to him. The pupil who is able to inspire the sympathy of his teacher of art, English or Latin for the enthusiasm that he develops in his history class is an unusual person. And the teacher of English who is able to enlist cooperation and assistance from the teachers of mathematics, industrial arts and commerce in his own efforts to improve English expression is a rare individual.

Such pupils and such teachers who attempt to go beyond the order of the administrative procedure of the high school and enlist their fellows in a cooperative undertaking have to work upstream. Not only are they doing the unusual thing, but they are in the peculiar position of individuals who are asking favors from others who are under no obligation to grant the favors. The English teacher has no right to expect teachers in other departments to become enthusiastic about English. The history teacher is not going to put forth additional effort to help the art teacher; if he does he may be placing himself under the suspicion of meddling with matters of no concern to him.

Difficulty of Enriching Program

No one would contend that the traditional administrative program of the high school makes it impossible for either teacher or pupil to engage in the type of educational activity that is to his liking, that is rich in varied and important associations and that furnishes possibilities for developing an integrated personality. No one would contend that cooperation among teachers and guidance of individual pupils and groups of pupils are prevented by any system of high school administration. On the other hand, the traditional administrative program in the high school does make such an enriched program difficult; the result is that teachers and pupils, as a rule, do not go out of their way to make unusual efforts to enrich educational experiences. They would rather follow along the lines indicated by the traditional administrative procedure.

Our administrative hierarchy has left the teacher without authority or responsibility in dealing with pupils. But that is not all. Traditional practice has also attempted to save the teacher from the responsibility of dealing with parents. A rule that all callers at the school building must first appear at the principal's office has kept many parents away from classrooms and teachers.

One reason for the initiation of this regulation was the feeling that the principal should inspect each visitor, particularly each parent, to discover whether the caller was in a safe emotional state to visit a teacher. In fact, the old idea was that one of the most important functions of the

principal is to protect the teacher from the parent.

The parent-teacher association was formed for the purpose of creating a closer and friendlier relation between the parent and teacher. But the principal has taken over the management of the parent-teacher association in most schools. In some districts the parent-teacher association holds meetings during school hours so that teachers are unable to attend. In most parent-teacher organizations the meetings are too general in character to do any more for the schools than to foster a feeling of good will and to allow teachers to meet parents.

Traditionally, the whole program of parent contact with the school keeps teachers and parents apart and leaves the teacher uninfluenced by the home except as individuals among teachers and parents break through the general practice.

In cities, teachers usually live in different neighborhoods from those in which they teach so that they have no firsthand knowledge of the community life about the school. Again, the tendency is all in the direction of making the teacher an isolated individual who comes in the morning to teach the courses that are imposed upon him and his pupils.

A Superintendent's Round Table

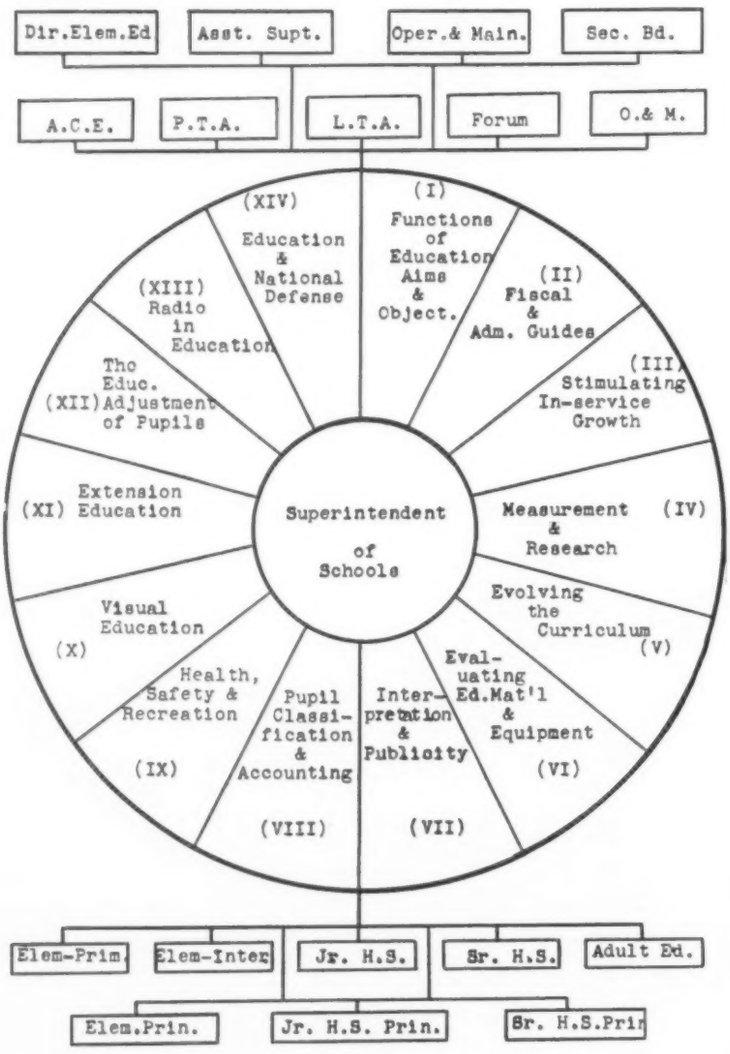

Chart showing the personnel and organization of the Saturday morning round-table conference that is conducted by the superintendent of schools of Lincoln, Neb. All organized groups in the school system are represented at the conference and participate in educational planning, according to Oliver H. Bimson, assistant superintendent of schools.

Administration exists only for the purpose of improving the education of children; to say it differently, administration exists for the purpose of making the work of the teacher more effective. If this is meant seriously, it must be interpreted to mean that the teacher is the center of the instructional picture. And a teacher cannot be the center of the instructional picture if he is only the shadow of an administrator.

Teachers who dare be only the extended or expanded personality of a domineering principal or supervisor cannot be the most important influence in the learning situation. No, teachers must be themselves, original, resourceful, full of initiative and responsible before they can be considered the dominating factor in instructional activities.

For practical administration this would mean that the school organization should serve the teacher's requirements for instruction, not the administrator's interpretation of the teacher's requirements. To be more specific, the teacher should make his own plans for the needs of the boys and girls who work with him. He alone can make these plans effectually because he alone knows his requirements. When the good of his pupils requires that he plan with other teachers, then teachers who plan cooperatively should set up the needed organization. The principal who recognizes the need for teachers' independence can help with such planning. In the end, the principal must coordinate the plans of all of his teachers for the administration of the school.

The important point is that the direction of administration to meet the needs of the classroom must proceed from the teacher to the principal and not from the principal to the teacher. Furthermore, new needs in administration must come from new needs in the classroom and must be initiated or suggested by the teacher or by the cooperative planning of teacher and principal, in which the teacher is independent in his thinking and planning.

If the above outlined principles and the discussion of them are sound, it will mean that to carry them out we must have some fundamental changes, especially in secondary school administration. These will be considered next month.

What Industry Wants

WALTER N. POLAKOV

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WE LEFT the machine age behind at the turn of the century and plunged headlong into the power age, but "men cannot compete with electricity." Declining cost of production and mounting unemployment clearly demonstrate this fact.

The day of artisans and craftsmen is gone. The day of technical specialists and industrial workers is here. An educational system that fails to recognize this fact is doomed to render social disservice.

Even in the most complex and technically exact industry, such as the manufacture of airplanes and airplane motors, the requirement for skilled workers is but 37.4 per cent of the total. Yet, bear in mind that this highly specialized skill cannot be acquired in any schoolroom or trade school. It takes actual shop experience of many years and the requirements may be quite dissimilar at Lockheed and at Ford.

What, then, is the function of schools in fitting young people to the industrial life of the technologically changed society?

Professor Taussig formulated this fundamental requisite: "The removal of all artificial barriers to choice of occupation is the most important goal of society." Of course, the school alone cannot accomplish this. There are many other factors. A coal miner who has lost his job to an electrified power mobile loader or conveyor cannot move from his isolated mountain community to an industrial center because he does not know where to go; because he has no money to move and take the family, or because he is in debt to the company's store and was paid in the "tin" money of company scrip; so it goes from industry to industry, from locality to locality.

The school, however, need not aggravate the already nearly desperate situation by preparing "carpenters" or "welders" or "textile spinners" or "rubber-heel trimmers" ad infinitum.

Technology is developing new processes; consequently, industry is in a state of flux and society is dislocated.

A year ago Philip Murray, president of the steel workers' organizing committee, testified before the temporary National Economic Committee: "The strip mills have reduced entire communities to ruin. Thriving steel towns have been converted into ghost towns overnight. . . . high school graduates cannot find work and are lucky to get opportunities to go to C.C.C. camps. Boards of directors sitting in the financial centers of the nation. . . . in one decision wipe out a complete mill and ruin an entire town, and they do it apparently without any thought of responsibility for the social consequences. . . . From 1929 to 1939 old-style hand plate, sheet and tin plate plants have been permanently abandoned. There were 38,470 workers displaced . . . 22,900 more soon to be thrown into the streets." These were trained, highly skilled men but their skill became obsolete overnight. Shall we train pupils for jobs that will pass out of existence by the time they are graduated?

Of course, with our present feverish defense activities some new and temporary jobs are created. Men and women who are trained in loading shells or assembling time bombs will have no further use for their skills

Industry is in a state of flux because of new technological processes that are constantly being developed and the schools should take that fact into consideration in planning their industrial courses. Emphasis should be laid on developing basic characteristics, such as correct perception, prompt reaction, sustained attention.

Sewing class at work in the State Trade School at New Britain, Conn.

after the need for blasting the enemies is gone. What will become of their specialized skills?

Obviously, we have two distinct and fundamentally different problems. One is to prepare our young citizens for future useful occupations without the artificial barriers of choice of occupation. The other is quickly and effectively to fit men and women to carry on our present defense activities. The first task is justly the responsibility of society and of public schools; the second is a job for the munitions contractors and manufacturers. Schools cannot produce all the occupational classifications to order for this and that plant, mill or factory. In this respect the present war is not different from the World War. Then we had the "vestibule training," in which "machine hands" of adequate skill were successfully fitted in from six days to six weeks. This can be done again even more easily because machinery is automatic and much more precise than it was in 1917.

The primary task of schools, however, is to prepare our youth to meet the fundamental requisites of our power age, mass producing industries. I have described the basic elements of such qualifications a few years ago in my book, "The Power Age," *i.e.* "sustained attention," "correct perception" and "prompt reaction." These are the requisites of an automobile driver, a switchboard operator, a textile weaver, a soap maker, a cook, an aviator, an office executive, a statistician or a laboratory chemist.

The development and refinement of these psychological traits are indispensable for any future activity. The school has many ways to achieve this result: it must do away with routine and short-cuts and the taking away of initiative by devising "easy steps for little feet." Instead, the school must inject interest and develop the ability to make rapid readjustments and to resist distraction. It must devise methods of teaching exact observation, keen analysis and distinction between the essential and incidental; it must teach orders of abstractions and practice differentiation of what is "inside of one's skin" from what is outside. In a word, scientific approach and method must permeate the curriculum. Finally, the school must train students to react precisely and quickly to various stimuli rather than to meander through academic abstractions in our secondary schools.

In order to place the emphasis on the development of these essentials, the curriculum should, of course, be altered and amplified, a subject that cannot be discussed here at length. Such revision of the curriculum is as important in academic courses as it is in vocational training.

An employment manager of a large concern once told me that she prefers to hire office girls who have been taking lessons in interpretive barefoot dancing and in mathematics. It is advice worth pondering.

In view of the several bills pending before Congress, it is proper and expedient that the wage earners of this country whose children and jobs are so directly affected by various phases of vocational training should be consulted by both educators and law-makers. The Congress of Industrial Organizations must be heard, for no other section of our social pattern has more at stake or is better qualified to voice its judgment of the training offered in the schools.

Another subject that should receive most careful consideration is whether, ignorantly or with malice aforethought, the students of vocational schools should be given the "experience" of doing actual work. While practical experience is indispensable, one can hardly find justification for increasing the unemployment of skilled labor by assigning work to vocational students. This function of practical experience justly belongs to union apprenticeship.

"But what about a compromise," some may say; "could we not have schools divided into those that train carpenters' sons to become carpenters and doctors' sons to become learned men?" Such a question of crude vocational training does not deserve the dignity of an answer. If and when America surrenders her democracy to dictatorship, if and when America decides to provoke class warfare or to inaugurate the hierarchy of Hindu castes, then and then only will an educational system that instills "class distinction" in the classrooms be warranted.

Service of Supplies

A Case for Staff Cooperation

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THE selection and care of supplies and equipment represent a phase of school administration in which employes can successfully participate. It is desirable to provide for this participation in the code of rules and regulations of the board of education.

The teaching and the nonteaching workers, trained for the duties they are to perform, can render valuable assistance in determining the policies and in carrying out these policies. Furthermore, their participation in the service of supplies will make them more efficient workers. They should have a recognized function with respect to selection, storage and distribution according to the policy that has been democratically determined and legalized by adoption by the board of education.

Policies are philosophical statements and objectives translated into language that can be easily understood by board members, employed personnel and patrons. They represent major objectives and at the same time they express obligations that must be met to carry out the objectives. For example, a board that has determined that a kindergarten shall be established is obliged to consider the amount and kind of floor space needed, its equipment and unique features that are not necessary for other departments of the school.

When the board establishes the policy of kindergartens for the community it makes them legal. However, the policy can be formulated only after the superintendent and his staff have made an extensive study of community needs and like provisions in other communities. Likewise, the specifications for the kinds of building facilities and equipment needed for kindergartens are determined by the board only after careful investigation by staff members under the direction of the superintendent of schools. Thus, the staff cooperates in the collection of the information necessary to formulate the board's philosophy. Then it is the responsibility of the superintendent and his co-workers to carry out the policy of the board.

The problem of the division of responsibility between the board of education and the superintendent and his staff is more easily solved if all concerned will recognize the board of education as a legislative body responsible for determining policies, for their execution and for the appraisal of the educational program of the state in the local community. While it is responsible for these three activities, the board of education recognizes that it is not competent to perform the executive activity, which should be delegated to professionally trained officials who are especially qualified to conduct technical assignments.

"Service of supplies is the activity that is concerned with the purchase, storage and distribution of books, equipment and supplies that are essential to the program under the policies that are set forth by the board of education"[1]

In order to understand the executive activity better, one should keep in mind that it is "all the acts or processes essential to make policies and procedures effective."[2] All members of the employed personnel are co-responsible to a greater or less degree for the proper functioning of the executive activity. Each has a recognized place in the determination of policy and in carrying it out within the pattern made legal by the board.

Every member of the employed personnel, every member of the board of education and every citizen of the community has the right to propose what he considers to be desirable policy to the board of education through the superintendent. If preliminary discussion of the proposal by the board seems to justify further study, the board should request the superintendent to direct the research necessary to obtain a complete understanding of the proposal. The persons selected to conduct the research will depend upon the problem to be considered and upon those who are best qualified by training and experience to study it.

Inasmuch as "instruction is the supreme purpose of the schools and the most important aspect of the executive activity . . . the teacher is the most important agent in the instructional process . . ."[3] and, therefore, often cooperates. All others of the employed personnel assist if the problem is within their field of training and experience.

The research conducted by the members of the staff consists of the "collection, tabulation, analysis and interpretation of data upon all conditions within the community and the schools"[4] that have bearing on the proposal. The careful study, with its interpretation, is presented to the board of education by the superintendent after which the board discusses it and either takes some action, postpones action until a later date or directs the superintendent to conduct additional study to answer questions that have arisen. If an action is taken that changes policy it becomes a part of the code of rules and regulations. Within this frame of government made legal by board action the employed personnel operates in carrying on the detailed activities incident to the educational program.

General statements of the division of responsibility must be considered in the light of the service to be rendered. For example:

"It is unreasonable to delegate to a layman board member, who is not

[1] Moehlman, Arthur B.: School Administration, Houghton Mifflin Company, 1940, p. 261.
[2] Ibid, p. 231.
[3] Ibid, p. 232.
[4] Ibid, p. 261.

paid for his technical knowledge of educational needs, the task of purchasing equipment and supplies which are essential to the educational development of the pupils along the lines of their discovered interests and needs . . . The board's activity should properly be limited to determining policies for supply management and to assuming a broad general control in this matter."[5]

The school staff, on the other hand, because of its training and experience, is in a position to recognize that "educational supplies, textbooks and equipment must be considered solely from the standpoint of their value in facilitating the instructional process. The selection must be made objectively in terms of needs as discovered in classroom practice, in accordance with the policies of the board of education."[6]

Appraisal of practices and of their own policies is an important function of the board as illustrated in the public school code of Hamtramck, Mich., which states:

"The aim of appraisal activity is to make the instructional process ever more efficient, both in planning and in executing, so that the public schools of Hamtramck may serve the needs and desires of the people ever more efficiently and the greatest opportunity for development shall be given to each individual child in accordance with his capacity and need."[7]

Must Weigh Policies

Policies should be reconsidered from time to time as research reveals that the conditions that determined the policy have changed or if the results that are obtained are not satisfactory.

It is therefore recognized that: "The school board itself, by reason of its function of evaluation, has the duty to question the wisdom of any policies which have already been adopted and to instruct the superintendent to propose changes which may be indicated as desirable by the poor results obtained."[8]

This should, of course, apply to the service of supplies as it does to other services and means that research on standards of quality and quantity, on best methods of distribution, on storage and on use must be continuous. It means that the study of the service of supplies is a continuing process and it must never be assumed that a standard should not be changed simply because it has been accepted.

The relationship of the board to the employed personnel and the respective areas of responsibility of each should be clearly stated in the code of rules and regulations. These relationships are so important and so specific in definite areas that each area should be given careful and extended consideration.

The following statements concerning the service of supplies are presented for the consideration of boards of education.[9]

Article 11—Supplies and Equipment

Section 1. Whereas supplies and equipment are indispensable in achieving the objectives of education as embodied in the courses of study, they shall be selected by the members of the trained personnel under the leadership of the superintendent of schools in the light of the contribution they make to the educational process.

Section 2. Standards for instructional supplies and equipment shall be evolved by the professional staff under the direction of the superintendent and such standards shall be required to conform to current curricular requirements and methods of teaching.

Section 3. Standards for noninstructional supplies and equipment shall be evolved by the members of the trained personnel (the trained personnel includes all trained workers in the system while the professional staff is limited to those immediately concerned with the instructional process) under the direction of the superintendent, and such standards shall be made in terms of their direct and indirect contribution to instruction.

Section 4. The amount and quality of supplies and equipment to be purchased by the board of education shall be determined by the recommendations of the trained personnel under the direction of the superintendent and controlled only by the funds available.

Section 5. The purchasing of supplies and equipment shall be under the supervision of the superintendent subject to the usual budgetry, purchasing, accounting and auditing procedures.

Section 6. Because of the fact that there is a seasonal fluctuation in the price of supplies and equipment, it shall be the policy of the board of education to purchase, when at all feasible, during the season when prices of various commodities are most favorable.

Section 7. All purchases of supplies and equipment of such value as to warrant the soliciting of bids shall be made only after an adequate number of firms have been notified sufficiently in advance of the impending purchase and have been supplied with minimum specifications of quality and performance required of the anticipated commodities.

Section 8. When bids are presented by firms on products which meet the required specifications as set up by the professional staff, purchase shall be made from the firm submitting the lowest bids, but the board shall have the right to reject any or all bids or to select any item or items from any bid.

Section 9. Adequate provision shall be made for the receipt, storage and distribution of supplies and equipment.

Section 10. A continuing inventory shall be kept in a form which will make available at any time the amount and value of supplies and equipment on hand.

Duties of Board and Staff

The relationships of the board of education with the specialized service of supplies have been illustrated. With this service, as with others, the duties of the board are planning and legislating, *i.e.* confirming recommendations, appraising and interpreting. On the other hand, the duties of the staff in this service, as in others, are to cooperate in the research that is essential in determining policies and in the actual carrying out of all parts of the educational plan within the framework of the board's policy.

[5]Overn, A. V.: Handbook for Public School Boards, New York State School Boards Association, Inc., 1940, pp. 104, 108.

[6]Moehlman, Arthur B., and Keyworth, M. R.: The Public School Code of the Hamtramck, Michigan, Public Schools, 1927, p. 176.

[7]Ibid, p. 242.

[8]Overn, op. cit. p. 77.

[9]Carpenter, W. W., Capps, A. G., and Townsend, L. G.: Suggestions for a Code of Rules and Regulations for Missouri Boards of Education, University of Missouri Bulletin **41**:20, p. 38.

New Idea in Speech Work

EDWARD PALZER
Associate Editor, Platform News

TO THE average administrator, the speech program often appears to represent a conglomeration of activities that are more or less valuable to the pupils. To him there are two general classifications of speech courses, curricular and extracurricular. Yet he well appreciates that there are pupils who need help in speech, who are not enrolled in the regular speech class and who cannot attend sessions of the clubs and extracurricular groups.

There are slow pupils who do not profit from competitive activity. There are talented ones who would be eager to go further along their particular vein of interest and ability but must submerge their eagerness into a stereotyped general speech training.

Specific Training Needed

Actually, there is no such thing as speech training "in general" any more than there is music training "in general." In music a pupil may learn to sing, to play the oboe or to master the timpani. In speech work a pupil must become personally proficient in a certain branch of platform or dramatic art before he profits much from the general curriculum. Without such proficiency, in fact, the curriculum is meaningless to him.

Often a speech instructor feels compelled to spend his time on a few pupils in order to make a good showing in contests or exhibitions. Much depends on the attitude of the administrator under whom he must work.

I know of an instance in which an applicant for a speech position in a high school was given a better objective. The superintendent told him frankly that the contests were not all-important and that he wanted a speech instructor who would be willing to spend time giving short courses in various practical divisions of speech to individual pupils and small groups as the need became apparent. He was willing to make provision for such special instruction. For example, a group of timid senior girls might come in for a few weeks of quasi-private, quasi-clinical instruction; or a pupil who showed inability to handle ordinary conversational speech might be sent in for help.

Such a "course" could be organized at any time with a minimum of two interested pupils. They could meet with the instructor during free periods and a study plan, consisting of five lessons, could be worked out as the program became organized. The instructor would guide and supervise the voluntary practice sessions. Each of the five lessons would require a certain number of practice sessions and each lesson might last about twenty minutes. At the end of the five lessons, covering perhaps two or three weeks, the pupils would, upon demonstrating proficiency and improvement, be presented with a small certificate of achievement, with a notation on the "course" completed.

Thus, there might be three courses in extemporaneous speaking, each representing added achievement; or in platform speaking, or in any phase of dramatics, including the crafts of the stage. Special courses in personal adjustment, mental hygiene, speech improvement and dialect could be added. In other words, the pupil, having made a definite achievement, would have some record of what he had accomplished.

Duplicate copies of these certificates would be filed in the principal's office. In that way, the administrator would know what had actually been accomplished by that pupil and a certain number of certificates from a given pupil in the school year might well add up to an award, a letter or some kind of recognition. The teacher of speech would take more interest in the personal needs and ambitions of pupils who come to him if he felt that his sincere efforts would be appreciated and recognized by his administrator.

The program would not be set up in opposition to the extracurricular or the classroom setup. It would, in effect, complement both and also afford opportunities to the neglected.

If small groups of pupils were well trained in facial makeup, stage design, acting, pantomime, scene design and construction, stage lighting, costuming and other specialized aspects of dramatics, there would be much better extracurricular work all around. Most extracurricular groups plunge ahead too rapidly, without having the individual skill necessary to make their particular enterprise a success. Pupils trained in these special branches could form a backlog of trained crews, ready to come to the service of their school.

Short Courses Helpful

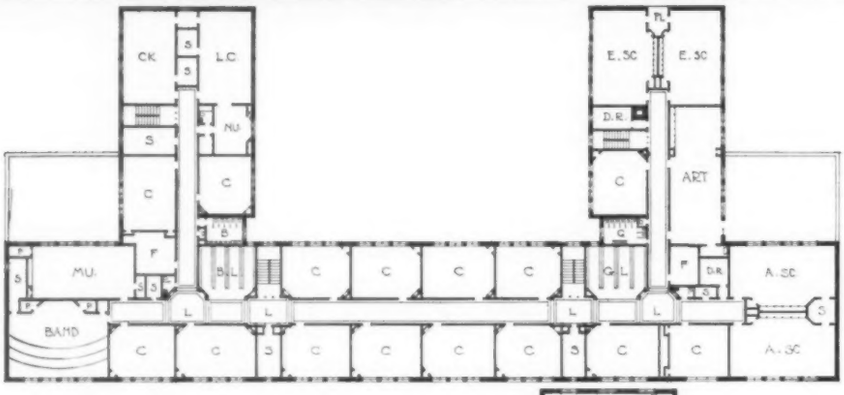
The core program itself depends upon the oral proficiency of the individual. General extemporaneous and platform speech training, given in small doses, would do much to raise the general speech level of the whole student body. A flexible speech setup as outlined would offer short courses in conversational speech, voice improvement, development of poise and confidence, parliamentary procedures, speech correction, pronunciation, enunciation and many skills that are taken for granted.

If the speech course is too long or too complicated, most pupils shy away and only a small group profits from the fact that the school has a speech department. Short, well-prepared courses lasting about two weeks would accomplish much for the majority of the pupils.

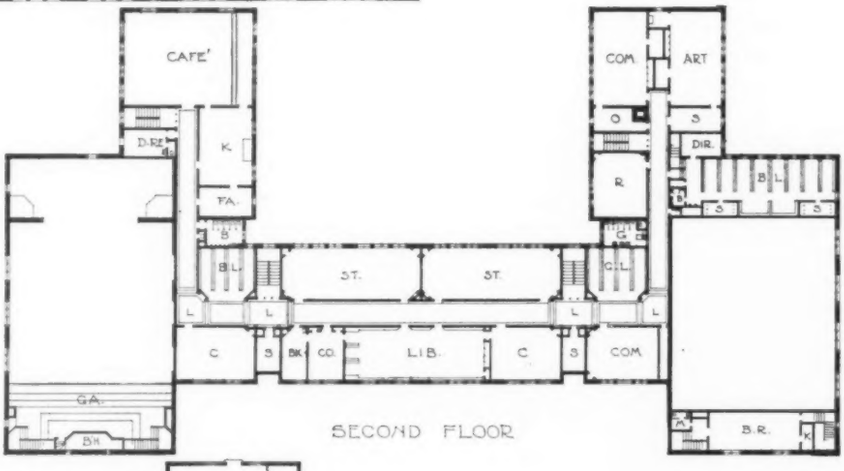
Those who take exception to this "cafeteria style" of speech instruction may pause at the following statement by a speech instructor.

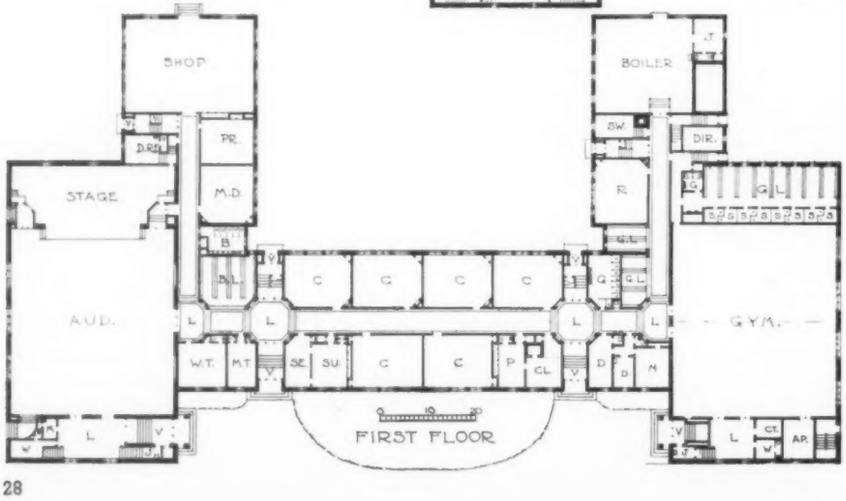
"Our school has had a separate speech department for twelve years. During these years we have had our share of public acclaim and can boast of a fairly long list of successful students and yet the principal of our school only recently wrote: 'In my class visits I find a common weakness. It is the willingness of teachers to accept from pupils speech that is inaudible to many members of the group.' Such a criticism coming from a school in which speech instruction has been successfully established is a serious indictment."

Above: Exterior of Long Beach Junior-Senior High School, Long Beach, N. Y. A damp and waterproof barrier has been incorporated within the walls and, in addition, free-standing furring has been provided to conceal plumbing, heating and other pipes, leaving the rooms free of unsightly fixtures. The building was designed by Albert Wilson of Wilson and Rahm, New York architectural firm.



Right: The second floor contains the library, study halls, kitchen and cafeteria, in addition to classrooms. The dining facilities include a faculty dining room separate from the cafeteria. The library is an imposing room with open book shelves on all of the walls. Above: The homemaking department on the third floor comprises a cooking room, living center and nursery. Also on this floor are the band and music rooms. These rooms are completely soundproofed and isolated.





Left: Plan of the first floor on which are located the auditorium and gymnasium. The auditorium is illuminated with six large reflecting fixtures and a row of circular recessed lights on the ceiling. The stage has ample entrance and exit facilities with two separate dressing rooms. The gymnasium is equipped with a folding partition so that it can be separated into two sections. The first floor also houses the superintendent's and principal's offices and workshop.

Junior-Senior High School, Long Beach, N. Y.

ALBERT WILSON, Architect

WALTER J. SCHWALJE, Superintendent

CONSTRUCTION DETAILS

CONSTRUCTION: Semimodern Georgian style; oversize red brick laid in light colored mortar, with cast stone trimmings. Fireproof throughout. Floor slabs, reenforced concrete; partitions, cinder concrete; outside wall furring, metal. Windows, wood, sliding pivot sash. Stairs, steel with slate treads and platforms.

FLOORING: Corridors and lobbies, terrazzo; library, study halls, classrooms, dining room, cafeteria and homemaking department, asphalt tile; auditorium, cement and asphalt tile; toilets, tile; gymnasium, wood block; kitchen, quarry tile; shop, wood block and cement; boiler room, switch room and janitors' facilities, cement.

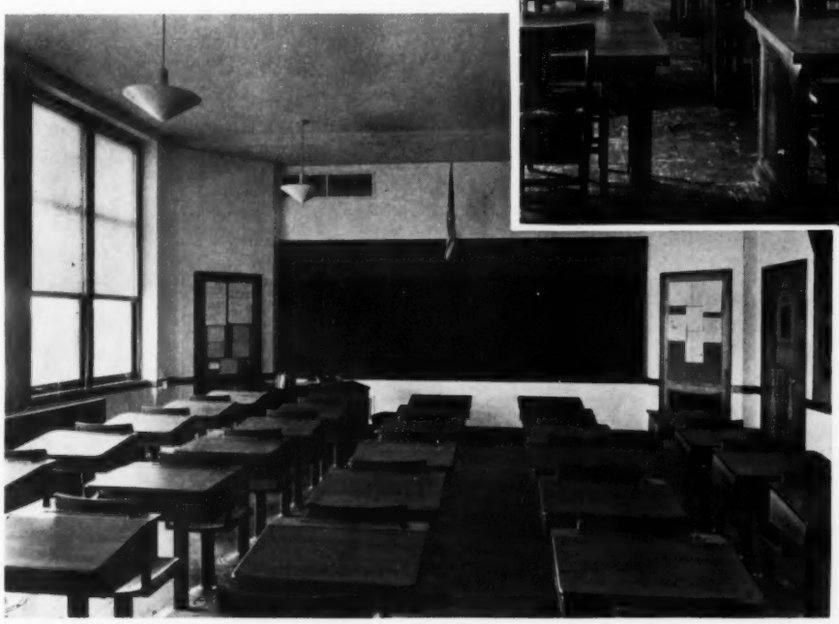
WALLS: Corridors, Tennessee marble wainscot with plaster above; auditorium lobby, marble to full height; gymnasium, glazed terra cotta wainscot with plaster above; homemaking department and kitchen, ceramic tile wainscot with plaster above; shop and boiler room, sand lime brick. Classrooms and study halls, plaster.

CEILINGS: Corridors, classrooms, cafeteria, kitchen, homemaking department, library and gymnasium, acoustical plaster; auditorium, acoustical tile; band and music rooms, special soundproofing material.

LIGHTING: Gymnasium, recessed lensed glass fixtures; auditorium, indirect and recessed; corridors, recessed.

HEATING: Two pipe, upfeed low pressure steam, vacuum return type generated from two oil-fired boilers.

VENTILATING: Classrooms, unit type; auditorium and gymnasium, special ventilation; toilets, shower and locker rooms, kitchen and science rooms, mechanical exhaust.



Top: The auditorium has a seating capacity of 750. Center: The library. Left: A typical classroom. Front corners are cut off to obtain a teacher's closet, a bookcase and an exhaust vent duct space. By this treatment a saving of 18 inches was made. Added together over about 40 classrooms, this additional space, which would have been wasted otherwise, made it possible to have two extra classrooms.

Shall We Departmentalize?

HARLAN L. HAGMAN
Superintendent of Schools, Warrenville, Ill.

THE rise of the junior high school movement was in part predicated upon the acceptance of the traditional high school departmental plan as a desirable organization for imitation by grades below the ninth. More recently, the premises upon which acceptance of the departmental system depended have been challenged. Any inquiry into general opinion reveals sharp contrasts of thought, which, however, do not necessarily prove or disprove the validity of the departmental system as applied to public schools.

The differences in opinion may be recognized directly in the following summary of some of the opinions on the question that are currently finding expression among school people throughout the country.

YES

The departmental program utilizes to the best advantage teaching personnel trained for specific fields.

The departmental program assures the variety of method and approach gained by experiences of the child with several teachers.

The child has a greater chance of finding kinship in personality if the school program provides him with contact with more than one teacher.

The broadened aspect of the program, together with the availability of many distinct abilities among the teachers, permits the program to become adjusted to the needs and desires of individual children.

In a departmental program each child is stimulated by contacts with a variety of teacher personalities.

The stimulation of a changing program best keeps alive the keen interest and alertness of the child.

Standards of scholarship are raised by departmental systems.

The child gains a broader viewpoint by a varied school experience.

It is a desirable and educative experience for children to adjust themselves to varied personalities.

The departmental plan permits adequate supervision with economy of time and effort in administration.

No part of the school program is neglected because specific provision for each school activity is made in a departmental program.

Under the departmental plan, teacher load can be equalized.

Teachers need not be jacks-of-all-trades but can be masters of their fields.

Teachers can be engaged for specific program needs. The program does not have to depend upon the strengths and weaknesses of individual teachers working alone.

Inasmuch as each teacher has special interests and abilities, the school administration can best capitalize on those interests and abilities by departmentalization of the instructional program.

Economy of administration is permitted without harmful effects by centralization of equipment. Duplication of equipment is not necessary.

Thorough use of available equipment is permitted without congestion because both the instruction and the equipment are departmental.

Under the departmental plan, responsibility is fixed. Inadequate teaching in any area is readily apparent.

NO

The child's emotional stability is best assured by a well-ordered and continuous school program.

Too often, the departmental program prevents the teacher from knowing her pupils intimately.

Good teaching should be given opportunity to become effective. This is denied in the rapid changes of the departmental program.

Learning is a continuous process that should not be subject to the artificial controls of a program of time allotments.

Learning is too often inadequate because of limited time to pursue the developments of a lesson field.

Most modern psychologists agree to a concept of the "whole" learning of a child as opposed to what might be called "compartmental" learning.

The multiplicity of pupil contacts that must be faced by each teacher prevents attention to individual personality problems.

Departmentalization makes a school a factory rather than a home for children.

Necessary integration of many programs makes a departmental system difficult to administer to the best interest of pupils and teachers.

Division of responsibility among teachers leads to the failure to accept responsibility wholeheartedly.

Increased salary costs follow when experts in specialized fields assume the entire educational program.

Classroom control is more difficult under a departmental plan.

Increased difficulty in pupil accounting results from the institution of departmental programs.

The beneficent effect of good teaching in some classes is offset by poor teaching in other classes.

Departmentalization of instruction leads to an overemphasis on subject matter.

The departmental plan is developed only upon the acceptance of an outworn philosophy of education.

The departmental program is an attempt to imitate colleges and universities and has no psychological foundation to support its use.

Lack of direct and thorough attention to problems of individual pupils leads to lowered educational standards.

The rise of the homeroom movement in high schools indicates the realization on the part of many that the departmental plan has fatal weaknesses that must be overcome or offset.

Education of an Administrator

WALTER D. COCKING

Dean, College of Education, University of Georgia

WHAT kind of preparation is needed to equip a person as a school administrator? In an effort to answer this question, the National Association of Colleges and Departments of Education in 1938 authorized the appointment of a committee charged with the responsibility of (1) studying the present practices used in the education of school administrators and (2) proposing a new program for consideration.

In preparing to study present practices a subcommittee selected the programs of 15 major institutions for careful analysis. Field trips were made in order to obtain firsthand information.

Believing that the philosophy of school administration held by an institution should provide the basis for its program, the committee attempted to obtain statements of the philosophies underlying the preparation of school administrators. In some of the institutions no philosophy had been clearly formulated. At certain institutions, however, working philosophies were described clearly. Merely stating a point of view does not guarantee its being the basis of the program developed and study of the existing programs frequently revealed little compatibility with the stated philosophy.

Two Points of View Revealed

The statements obtained disclosed two points of view: (1) that of administration as a profession per se and (2) that of administration as a process in the profession of teaching.

In schools holding the first view the program consists for the most part of a relatively narrow but intensive sequence of courses in the technical aspects of school administration.

The program in institutions adhering to the second viewpoint is usually based on a more extensive contact with the various areas of education and with related non-education areas. Although most schools do not belong wholly to either of these extremes, there is evidence that the relative adherence to one or the other has definite influence on the kind of program that is developed.

None of the universities studied offered a program in school administration at the undergraduate level. This practice grows out of the almost unanimous agreement that the first task in the education of a school administrator is the education of a classroom teacher. With the increasing emphasis on a minimum four year teacher education program there is a consequent lifting of the program of school administration education to the graduate level. Despite this trend, many administrators in some of the predominantly rural states have not completed work beyond the undergraduate level. Pending the adoption of higher certification standards in some areas, it would seem desirable that institutions serving these areas should offer some basic instruction in school administration at the undergraduate level.

Courses Are on Graduate Level

Programs of study are usually described in terms of graduate degrees. All of the institutions studied offer a one year program in school administration leading to the master's degree, except one school in which the program is a two year course. Each university also indicated a three year program leading to the degree of either doctor of education or doctor of philosophy. Only minor importance seems to have been attached to the conception of programs in terms of the functions for which the program may prepare.

It would seem essential that the program of training offered for school administrators should be based on the functions that administrators perform in a dynamic educational system and that such a program should be viewed as a whole. In other words, the emphasis should be placed upon complete training, regardless of degrees, rather than upon time, length of residence or academic courses of a particular kind.

Both the one year and three year programs may be divided into two general categories. In one category are institutions that require the student to take a specified pattern of courses. This group may be further broken down into those schools in which the program is confined largely to courses in education and those in which contacts with related non-education areas, such as political science, economics and sociology, are furnished in addition to courses in education.

The other category is represented by schools that develop individual programs for each student in keeping with his previous training and experience and with his ultimate professional destination. At some institutions the program lies between these extremes and consists of a core requirement plus prescribed specialized courses in terms of particular professional goals.

The early programs of education in school administration were largely limited in their procedures to lectures, readings and discussions. These procedures are still used in present day programs, but in most institutions they are supplemented by more recently adopted technics that have been found to offer several unique advantages.

Some of the institutions cling to an emphasis on systematized and specialized courses in which relatively little opportunity is presented for field work or other technics that bring the student into contact with the more practical problems of school administration.

Field Work Emphasized

On the other hand, some of the institutions have relegated formal specialized courses to a minor place in the professional program and have supplemented these with procedures that enable the student to work increasingly in field situations. Student participation in school surveys, administrative conferences, administrative apprenticeships or internships and administrative clinics are illustrative of the newer procedures that are being adopted in some schools.

Seminars: The thesis seminar or special seminar in given areas of specialization was found in most of the institutions visited. As a rule such seminars were found to operate near the end of the student's program. A few of the institutions are developing a general seminar in which all students in graduate programs of education enroll. In these general seminars students are kept in touch with developments and problems in areas of education other than their particular area of specialization.

General methods of investigation that are common to the various areas are called to the attention of the student, regardless of his ultimate professional destination. In some of the institutions general and special seminars are replacing to a large extent the more formal pattern of specialized courses, but it should be emphasized that merely changing the name from course to seminar will produce scanty results.

Student Participation in Surveys: Although student participation in surveys is not a requirement in the program of school administration at some institutions, practically all of them attempt to give their students some opportunity to participate in school surveys. Some administrators feel that this procedure has been abused in that institutions require student participation in surveys without regard for the need for this particular experience in the individual student's development. Such abuse could be remedied by taking the student into the planning of the survey as well as into the other stages. The student should not be used in a survey as a source of cheap labor but only if participation can be justified as an efficient method of furthering his development in school administration.

Administrative Apprenticeships: Apprenticeships have been advised for the prospective school administrator who has little or no administrative experience. Professors of school administration are recognizing that administrative experience obtained under the guidance of skilled administrators is a highly desirable part of the program of those students who have had previous administrative experience as well.

Some institutions believe that apprenticeship should come before completion of the campus program while others have taken the position that such experiences are more valuable if placed on a graduate intern basis.

At a few institutions apprenticeships in administration are not regarded as a formal part of the program but are arranged when an individual student indicates by his previous training and experience the need for such opportunities. Some of the schools indicated that they did not use this procedure because most of their students of school administration were mature individuals with a fairly large amount of administrative experience.

Administrative Clinics: The administrative clinic is one of the newest procedures to be utilized in the preparation of school administrators. Its advantages to the student are in part similar to those offered by participation in school surveys and through the administrative internship. The clinic gives the prospective school administrator opportunity to identify and to analyze administrative problems and to apply his knowledge to their solution. Furthermore, he sees more mature and experienced artisans at work on solutions to the problems and is given experience in cooperative planning. The clinic also has important advantages to the administrator in the field and to staff members working in school administration.

Cooperative Relationships: Another procedure of promise that is relatively new in programs of school administration consists of the cooperative relationships that have been established by two or more departments of an institution in the training of public and school administrators. Perhaps this procedure had its beginning in the recognition of the related areas of the social studies. At two or three institutions definite agreements are being developed whereby the specialists in the field of public administration and government will develop seminars in their areas for students majoring in school administration.

At one institution the professors of school administration have been asked to develop seminars in school administration for students majoring in public administration. Such relationships have the possibility of emphasizing general principles of administration in the training of administrative officers in schools and other areas of public service.

It is difficult to understand the indifference that national organizations of school administrators and professional schools offering programs in school administration have displayed to the establishment of entrance requirements to school administration programs.

In the majority of schools visited there are only two selective bases upon which students are chosen for school administration training: (1) the completion of a four year undergraduate college program and (2) sufficient money to permit attendance at the institution. Little concern has been expressed regarding the number of administrators needed to fill positions each year. Inasmuch as the era of quantitative educational expansion is drawing to a close and the tenure of present school administrators can be definitely discerned, it would seem advisable that the numbers educated each year for positions in school administration should be limited so that they will be in proportion to the demand.

Interest Is Not Enough

Desire on the part of the trainee alone is not sufficient reason for admission to a program that would prepare for school administration. Institutions have the opportunity and a moral responsibility for selecting applicants who give greatest promise of success as school administrators. Nor is guidance a process that ends after the initial selection for entrance into the program. Throughout the program there must be a continuous process of selection and guidance. Students should be encouraged or discouraged as early in their programs as possible.

One who studies programs for the preparation of school administrators must conclude that the most encouraging sign is a growing interest in the type and character of such programs. Practicing school administrators and college professors seem to be equally interested. There is a growing tendency for programs to be revised in the light of actual field needs and joint consideration by administrators and college people. The force of tradition, however, remains potent with the result that there is a considerable lag between announced aims and actual practice.

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Portfolio of HEATING AND VENTILATING

Objectives in Heating and Ventilating

STANLEY C. STACY

EARLY theories concerning the need for ventilating confined spaces wherein people gathered supposed that an excess of carbon dioxide made necessary a continual replenishing supply of fresh air. This theory was then superseded by the belief that the air was contaminated by body poisons and that organic effluvia would increase dangerously if fresh air was not continually being supplied and foul air removed.

Our present theory is based on maintaining a desirable thermal condition. Air volumes in confined spaces that are occupied by people must be kept within certain definite limits of temperature, of humidity and of air motion so as to be comfortable for habitation. This has been well substantiated by many scientific tests and we now try to establish certain definite limits of temperature and humidity of the air in the spaces being ventilated.

The heat of metabolism being continually given off by a person will vary from 200 to 350 Btu. per hour, depending upon the age and the activity of the individual. There is also a continual evaporation of the moisture from the skin, which will change the humidity of the surrounding air unless proper precautions are taken to control it.

In all occupied subdivisions of school buildings, the control of temperature, humidity and air motion of the various locations should be taken into account in the original design so as to prevent heat stagnation in these areas.

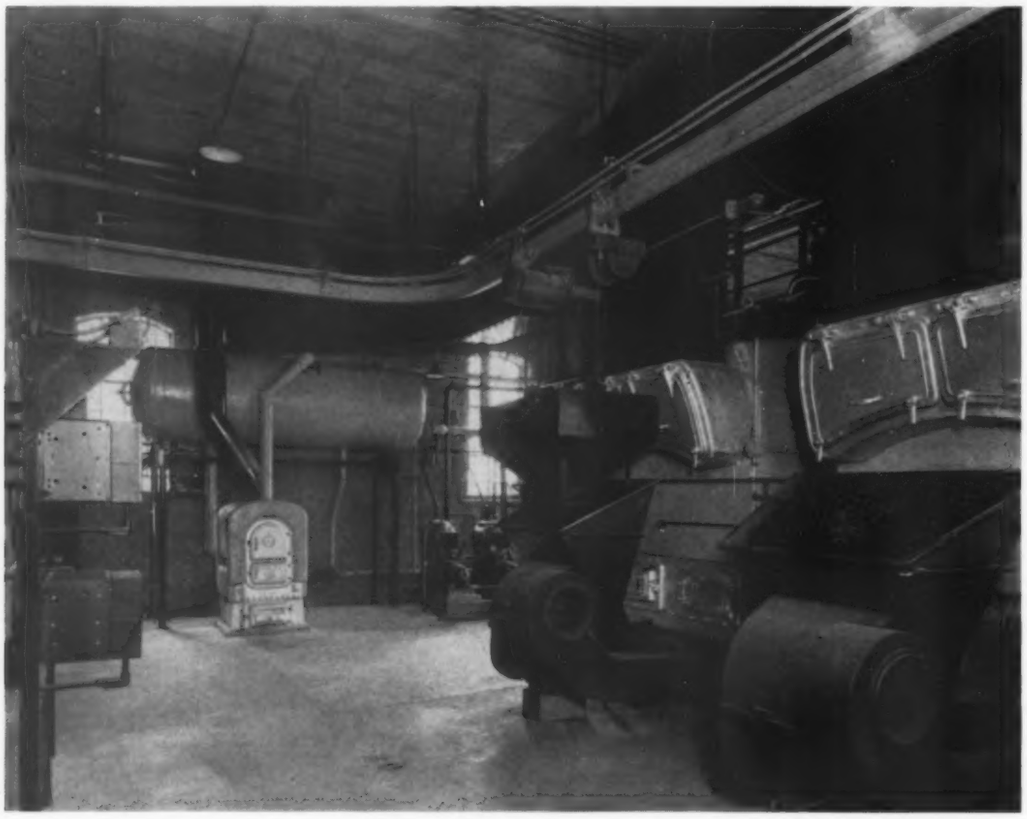
There are various means of accomplishing this control depending upon the size of the space to be ventilated, the type and the length of time of occupancy and the number of people to be accommodated.

Three factors that can be regulated and controlled are: the temperature, the humidity and the rate of motion. One, two or all three of these factors can be controlled so that the final result will provide a sufficient quantity of air within certain limits of temperature that will dissipate the heat of metabolism, remove body moisture at about the same rate as formed and provide air velocity to promote ready skin evaporation without chilling and without creating drafts. All of this can be done with reasonable economy.

In the "hot blast" system, the heating and ventilating functions are combined and heated air is pumped into the room at a sufficiently high temperature to counteract the heat losses. This temperature increases as the outside temperature falls and in the colder climates high air temperatures are needed to counteract the subzero outside temperatures. It is also necessary to operate the entire blast system in the mild weather when only a small amount of heat is required and open windows could be used for ventilation.

Many of these systems are in operation in school buildings, however, and give satisfaction. A simple form of this system is the hot air furnace used in small school buildings. This is adaptable to small buildings only and needs no special comment.

A method of heating and ventilating that has been almost universally adopted is the so-called "split sys-



Coal is the favored fuel at this school at Red Wing, Minn. In village and city schools throughout the nation, stokers are replacing hand-fired boilers, just as vapor vacuum is replacing ordinary steam, two pipe systems are supplanting one pipe systems, central fan systems are recirculating part of the air in place of venting outside air entirely, and unit ventilators are gaining ground over central fan systems.

Public School Buildings

Mechanical Engineer, Board of Education, Rochester, N. Y.

tem," wherein the heating and ventilating functions are separated. Sufficient radiators are installed in the various rooms to counteract all the heat losses and maintain the room at the proper temperature with the lowest outside air temperature experienced during the winter. In addition to this, sufficient air, which has been properly tempered, is introduced to provide adequately for the ventilating needs of the room.

One of the three main blowers in the ventilating system of Oakton School, Evanston, Ill. The split system of heating and ventilating is favored in the schools of this city. Sufficient radiators are installed in all rooms to offset heat losses and maintain proper temperature. In addition, sufficient air, properly tempered, is introduced to provide adequately for ventilating needs of the pupils and the teachers.

The simplest and cheapest means of providing ventilation is by opening the windows and letting fresh air blow in. This is called "open window ventilation" but is not quite as simple as the statement implies.

Whenever the temperature is above 60° F., there is no problem, but with the outside air much below 60° F. the windows cannot be opened directly upon the occupants without providing safeguards against drafts. Deflectors or window boards should be provided to deflect the cold air upward so as to mix it with the hot air arising from the radiators placed beneath the windows, or all of the windows should be opened a small amount from the top so as to mix the air with tempered air before circulating it to the breathing zone of the room. Additional radiation should be provided properly to temper this air in addition to the amount needed for offsetting the heat losses through the outside walls, windows and doors.

One disadvantage of the system is that the raising and lowering of the windows are necessarily done by the teacher and the frequency of needed adjustments will depend upon how mindful she is of good air conditions in the room. The more absorbed she is in the task of presenting her subject matter to the pupils, the less conscious she will be of the need for window manipulation. This will be especially true in the lower grades where the pupils do not speak up readily to tell of their discomfort.

Another disadvantage of this method is the variable quantity of air that is introduced into the classroom depending upon the wind velocity outside of the building. Either a stiff outside breeze or a change in the direction of the wind will have a considerable effect upon the amount of air introduced. There is also a tendency among some of the teachers to open only one or two windows in cold weather so that there is not a good distribution of outside air throughout the room. Despite these disadvantages, however, the open window provides a useful and economical means of ventilating classrooms. This is especially true during the milder weather in the spring and fall in the northern sections of the country and throughout the entire heating season in the southern and the milder sections.

In mechanical ventilation, the so-called "central fan system" uses one large fan to supply air to all or at least to a great many classrooms. Air is drawn in from the outside, usually through a series of screens or filters, and is then passed over and around certain heating coils. These coils provide intimate contact between the air and the hot surfaces so that the air is heated to the proper temperature. Air washers may be

installed in these fan casings to remove dirt and dust particles and to provide the proper humidity.

The fan gives the air momentum and causes it to flow along the various ducts and passages connected to the discharge of the fan. These ducts are spread out horizontally and are connected into various flues built into the walls of the building.

A separate flue provides each individual room with the necessary air. The best results have been obtained by discharging the incoming air into the upper part of the room, not less than 8 feet from the floor. The air is pumped into the room through diffuser openings set into the wall, which tend to spread it out evenly and to provide enough velocity to give a gentle air motion from these openings to the exterior walls without producing drafts.

Another system of mechanical ventilation is the so-called "unit system," wherein a small ventilating fan with its own heating coil is placed in each room to be ventilated. These units are completely assembled in a small cabinet and are designated as "heating and ventilating units." Usually placed along the exterior wall, each unit draws in its own air through an opening in the wall under the windows. The air, depending upon its cleanliness, may or may not pass through air filters on its way through the cabinet. The air passes around the heating coil through which steam circulates and is discharged vertically upward to the ceiling and then diffuses across the room and downward, finally passing out of the room at the exhaust opening provided for that purpose.

A modification of this unit system limits the air being introduced into the classroom to not less than 60° F., because of the noticeable drafts under other conditions. This modified unit is partially recirculating, beginning to draw in outside air when the room air temperature reaches 65° F. All air passing through the unit is heated to at least 60° F. If additional heat is needed, the air temperature will be increased above this minimum, being under thermostatic control. The amount of outside air will not reach 100 per cent until the room temperature reaches 68 to 70° F.

Results obtained from this type of unit have eliminated many of the complaints directed against the unit system caused by the unit delivering untempered outside air into the room which produced noticeable drafts and a sense of chill to the occupants of the room.

Assembly halls or auditoriums in modern school buildings offer the heating and ventilating engineer a problem different from that of classrooms. Here we have a large room, even a theater, the use of which varies from a small drama or music group to an overflowing audience. These conditions may exist with subzero temperatures outside or on a warm June evening. Frequently, only a small percentage of the auditorium is outside wall space where windows are provided. During many uses of an assembly hall, a dark or subduedly lighted room is essential so that even the existing windows are especially fitted to block out the light. Under these conditions, open window ventilating cannot be used and a mechanical ventilation scheme is needed.

Some systems provide a plenum chamber underneath the auditorium floor and small mushroom openings in the floor under the seats, through which openings the incoming air is forced. The air is drawn out of the auditorium through grille openings at or near the ceiling. With the development of theater air conditioning and especially air cooling, it has been found more advisable to supply the incoming air from above, through suitable openings in the walls or grilles in the ceiling, and to remove the air through the mushrooms under the seats to the plenum chamber and then to the exhaust fans. Much cooler air can thus be introduced into the room without drafts. This system appears to be superseding the former. It has proved more economical, gives a better diffusion of air and offers good possibilities for air cooling in warm weather.

School gymnasiums offer a less intricate problem. Here we have a large high-ceilinged room with many large windows and a relatively small number of people using the room at any one time. This affords the ideal opportunity to utilize the open window principle of ventilation. Here, also, we have the alertness of the health education teacher for manipulating these windows so as to maintain good air conditions.

One restriction of these conditions occurs when the gymnasiums are used for basketball and other exhibition games before large audiences who occupy bleachers set along the sides of the playing floor. Even then, open window ventilation may

A custodian adjusts the thermostat in the kindergarten at Oakton School, Evanston, Ill. Automatic temperature control has become a "must" requirement in the interests of economy of operation and of human comfort.

suffice if the window openings are well chosen and if means is provided to prevent cold air from blowing directly on the spectators.

As an aid in the positive movement of air through the room, a mechanical exhaust system is frequently used. The regular removal of a definite quantity of air from the room will mean that this air must be replaced by air coming in from the windows and corridors.

When the functions of the gymnasium and auditorium are combined into a single room, a mechanical system should be provided to care for conditions when the room is used as an assembly and when the dark shades are drawn making open window ventilation impossible. At other times, open window ventilation may be used. Very small assembly halls and gymnasiums can be treated just as if they were large classrooms and shops.

Adequate ventilation should be provided for kitchens and food preparation areas so that no food odors will permeate to other parts of the building. A good exhaust ventilating system giving the necessary air changes should be supplied. Replacement of this exhausted air can come from the cafeteria proper and from adjoining corridors. This will prove sufficient ventilation for the cafeteria as occupancy is for a short duration only. Heat losses may be overcome by means of direct radiation.

Unit heaters directing their discharge air along the outside walls will also prove very satisfactory and will provide a beneficial movement to the air. A special exhaust system should be installed from the dishwasher to care for its vapors.

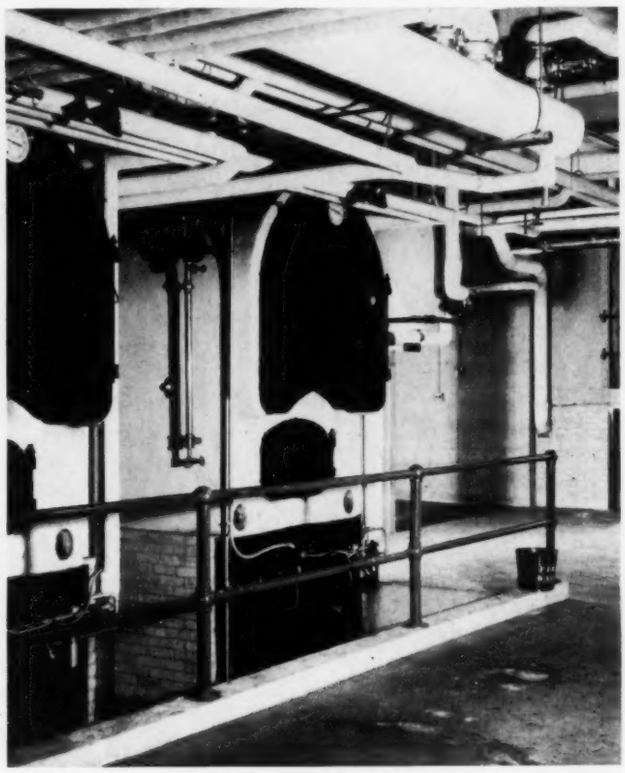
Other school occupancies that offer ventilating problems are locker rooms, shower rooms and natatoriums. Locker rooms should be designed with both a supply and an exhaust ventilating system. Great care should be used so that the path of the air travel will lead through all lockers as gymnasium suits and rubber sneaks are subject to body odors under the most favorable conditions. These rooms are likely to be spacious and independent systems for the supply and exhaust air with accompanying ducts, registers and grilles are usually preferred.

Vapors and moist air from the shower room can be combined with the exhaust air from the locker room and the mixture diluted sufficiently so that no condensation problems are encountered. Supply air to the shower rooms is optional, as air exhausted from these rooms can be replaced from adjoining locker rooms.

Natatoriums offer a unique problem because of the fact that the humidity of the air will eventually increase to the dew point, if the air is not changed. Both supply and exhaust air systems should be provided. Great care should be used to keep the locations of the air outlets at points at which the bathers will experience no objectionable drafts. When unclothed, the body is very susceptible to air movements and even the regular ventilating systems can create objectionable air currents. Under these conditions, it would be advantageous to slow down the ventilating fan so as to reduce the air movement during the class period and then to speed it up and flush out the room with outside air between periods. This control should be under the direction of the swimming teacher.

The same fan system can be used to supply air to the locker rooms, shower rooms and natatorium, and the exhaust from these rooms also can be tied together. Good results have been so obtained. Feasibility of these combinations will depend largely upon the building design and also upon what spaces are available for locating the fans and trunk ducts.

Andy, the engineer, inserts needle valve in oil burner.



Accidents are more likely when boilers are in pits.

One ventilation problem in connection with the natatorium is encountered during the summer vacation when the pool is shut down and left full of water. If the air in the room is not changed from time to time, the humidity will increase until the dew point is reached and then moisture will settle on woodwork and fixtures and will speed disintegration. By operating the fan at least once a week, the humidity of the air can be kept within safe limits.

The ventilation systems of toilets should be kept separate from all other ventilating systems in the building. In general, these can be exhaust systems only. The air used to replenish that exhausted can be drawn from the corridors through louvers or from under the toilet room doors.

The building itself will determine to a large extent the type of ventilating system that should be provided. Simplicity is the keynote of good and effective operation. At the same time the aim is to provide and to maintain air conditions within certain definite limits of temperature, humidity and air motion so as to be free of the concentration of body odors and of disagreeable drafts.

Automatic temperature control to keep the room within an acceptable temperature range is substantially a "must" requirement in the interest of economy of operation.

Humidifying Our Classroom Deserts

W. C. GINGERY **Principal, George Washington High School, Indianapolis**

IN MOST states, laws or school building codes require that schoolrooms shall be equipped with heating and ventilating devices that will supply approximately 30 cubic feet of fresh air per minute per pupil. It is also required that this air shall be heated to approximately 70° F., and it is recommended that a relative humidity of between 40 and 60 per cent be maintained.

The standard of 30 cubic feet of air per pupil per minute is arrived at by a computation using the average amount of carbon dioxide exhaled per person per minute, the normal carbon dioxide content of "fresh" air and an arbitrary upper limit of six or seven parts of carbon dioxide in 10,000 parts of air. This limit was formerly thought to be the amount beyond which it was not healthful to allow carbon dioxide to accumulate. At that time carbon dioxide was believed to be poisonous.

The term "fresh air" is difficult to define. In summer a room temperature of 70° F. with occupants lightly dressed and with windows open to allow a moderate circulation of air seems comfortable and does not appear to induce colds. In winter the same temperature and air velocity with room occupants much more warmly dressed might be thought chilly or drafty and colds and infections would be more prevalent. Thirty cubic feet of air per minute per pupil can be heated to the desired temperature and forced into the room without offensive draft. In some buildings it is done. Many ventilating systems, however, fail altogether to provide for humidification of the air that is supplied.

A suitable computation will show that with outside temperature 0° F. a 40 pupil room receiving 30 cubic feet of outside air per minute per pupil will have to have more than a barrel of water evaporated in it in an eight hour school day in order to maintain a relative humidity of 50 per cent at 70° F.

Since few ventilating plants supply anything like that amount of moisture, it follows that in order to keep the percentage of carbon dioxide to a small fraction we reduce the relative humidity of the atmosphere far below that of air in any natural situation.

If an indoor relative humidity approaching summer averages is to be maintained with an outdoor temperature below the freezing point, considerable changes in addition to humidifying apparatus will have to be made in most school buildings.

If the humidity inside a room with a temperature of 70° F. were maintained at the summer level with the outdoor temperature below freezing, condensed vapor would soon be streaming down the panes of single windows. Walls and ceilings not well insulated also would collect such condensation.

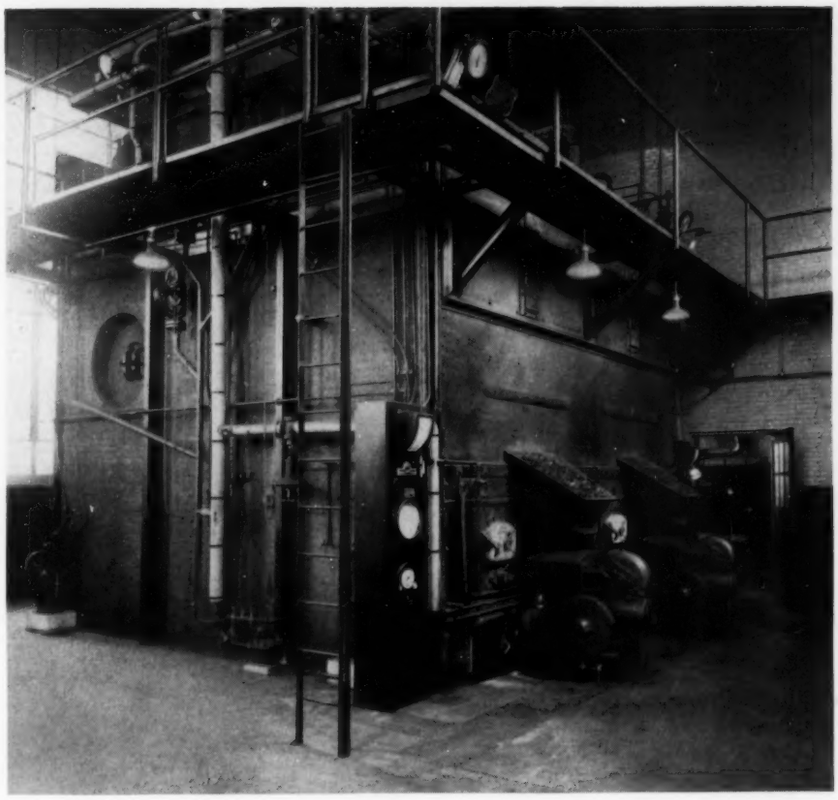
The dew-point corresponding to a temperature of 70° F. and a relative humidity of 50 per cent of saturation is approximately 50° F. To prevent condensation, therefore, the temperature of windows, walls and ceilings must not be allowed to fall as low as 50° F.

It seems probable that maximum comfort and maximum healthfulness might be obtained in a school in which the atmosphere is kept in motion with a velocity below that of a draft, the temperature varies continually but within very narrow limits around 70° F., the humidity is kept near the average summer level, approximately 50 per cent of saturation, and dust and objectionable gases are removed from the air. Probably, the amount of carbon dioxide present need not be considered.

To obtain such a condition the school will have to be especially constructed. Windows and outside doors will have to be double. All outside walls and ceilings will have to be well insulated against the passage of heat. The ventilating system will have to be equipped with an automatically controlled humidifier.

Correct humidification can be more easily maintained the more perfect the insulation since any cold surface will cause condensation and, hence, draw off part of the moisture. It will also be more easily and less expensively maintained if a high percentage of the air in the building is recirculated so that heat and moisture will be supplied to only a small fraction of the air. If this is done the air should be filtered, electrically cleaned or washed through a water spray in the process. If a water spray is used it can become the humidifier by a suitable temperature control for the water and it will also remove most dust particles and, possibly, some undesirable protein products of body combustion.

A school corporation, willing to gamble on better health for its children at a little beyond the minimum cost of a new building, a philanthropist or a foundation interested in public health might make a contribution of real worth by sponsoring the construction of such a building and a study over a period of years of the incidence of respiratory or other diseases among its occupants.



Catwalks of sturdy construction permit the engineer easy access to operating devices and to cleaning and repair jobs. The high ceiling in a boiler room also contributes to better ventilation, an important effect.

Is Your Boiler Room Hazardous?

GEORGE S. McELLROY **Heating Engineer, Board of Education, Pittsburgh**

BOILER room safety should start with the design of the structure in which the boilers are to be located and the idea of safety should be followed through to the smallest details. A safe boiler room provides for easy delivery of fuel, removal of ashes, at least two widely separated easy exits for attendants, plenty of light and ventilation and generous working areas around equipment.

In planning the boiler room, resist the tendency to underestimate the necessary space requirements during the preliminary studies; rather err on oversize for the extra space will be needed by the time you reach contract drawings.

Provide more than mere circulation space around the equipment, because an area of ample size definitely contributes to safe working conditions. Don't place boilers or any other equipment in pits. A boiler pit was never designed that was large enough. Pits are prolific sources of accidents. Set the boilers on the floor and, if they are too high for easy firing, plan for simple coal handling equipment.

While ample space should be provided for the storage of coal, no necessity exists for making this area larger than is actually needed. A large coal pile often takes fire from spontaneous combustion and when this happens it means flooding the coal or digging it out; either job is messy and sometimes dangerous.

Plan carefully for the storage and handling of ashes. Storage in cans is probably most satisfactory. The platform elevator type of ash hoist is preferable to the telescopic or crane type, although it is costly when equipped with the necessary safety devices. One large school system is throwing out all of its ash hoists and is substituting hatchways with electric motor operated hoists placed on the ash truck. The motor is plugged into an electric outlet beside the hatchway.

The height of the boiler room deserves careful attention. Allow plenty of space above the top of boilers to permit the construction of usable platforms and walkways for easy access by attendants and repairmen. Height also contributes to better ventilation. How often you encounter an overheated, low ceilinged boiler room!

Exits—usually two are required by law—should be widely separated and at least one, preferably the more favored for access from all parts of the room, should be studied to ensure its being ample in size and its presenting minimum hazard when it comes to handling parts for equipment and repairs.

Proper lighting is essential to safety. Windows are desirable as they provide not only light but ventilation and a source of air for combustion. Air for combustion should be obtained directly from the outside as the doors between the boiler room and the school proper, when they occupy the same building, should be fireproof and should be kept constantly closed. Study the location of windows so as to avoid cold drafts over firemen or other attendants.

Artificial illumination is, of course, necessary and should be provided on both the floor and the upper levels of the room. See that there is ample light on and around equipment. Provide ample convenience outlets so that extension cords of the safety type may be plugged in when repairs or emergency work is being done.

Study should go into the location of the piping and frequently operated valves to permit easy access to them without resorting to ladders or other portable helps. Avoidance of tripping or head striking hazards is imperative. If piping must be installed at low levels, try raising or lowering it enough to make it a bumping hazard about waist high or, better still, try to place it where it does not have to be passed over or under. Avoid placing pipes above equipment on which work has to be done. Study rerouting.

Valves that cannot be reached readily either from the floor or from planned walkways should be pro-

(*Continued on page* 48)

Speaking for the Southern States

W. I. DIXON

Supervisor of Specifications
Virginia State Department of Education

IN ORDER to obtain information on the types of heating and ventilating used in public schools in the South, a series of questions was forwarded to the directors of the school building divisions in the 10 Southern States east of the Mississippi River beginning with Virginia and Kentucky. The summation of the replies to these questions by the responsible individuals in each state is the basis for the following conclusions.

The smaller school buildings, of from one to four classrooms, are not generally provided with central heating systems. In some of the states, even in the larger schools, central heating systems are not provided. Particularly is this true in the deep South where climatic conditions require little heat during the school year.

In general, the smaller schools use cast iron stoves or space heaters in the individual rooms, such stoves being either jacketed or unjacketed. Emphasis in the past has been on the use of jacketed stoves, but this emphasis has in many cases been disregarded, owing to the fact that commercial jacketed stoves are much more expensive. Ventilation is provided by open windows or breeze windows or both. Three of the Southern States require window deflectors.

Steam or vapor is the predominatting source of heat supply for the larger schools that have central heating plants. It is significant to note that none of the states reporting indicates that the hot air furnace is used as a source of heat supply. There are three states in which warm air systems are used to some extent, but the source of heat supply is steam and not hot air.

The type of space heating units used is mainly cast iron radiation, but in some instances copper or cast iron heating elements are used with metal enclosures; these are generally known as convectors.

Open windows are used for fresh air in all states reporting. There are some installations of unit ventilators in which fresh air is introduced directly into the room by means of a fan and wall intake. The central plenum system of ventilation is also used.

Only one state of those reporting uses any means of exhausting air from the room. This state uses as a minimum gravity exhaust ducts beginning at the floor of the wardrobes or cloakrooms, extending directly to the outside and terminating in a ventilator head on the roof. The cloakroom or wardrobe doors are hung from 4 to 6 inches from the floor in order to create a movement of air at the floor level and at the same time to ventilate the wardrobe or cloakroom.

Owing to the fact that the mechanical systems of heating, ventilating and air conditioning are more expensive as to both first cost and maintenance, they are seldom used in the South except in the more costly buildings and in urban areas. The fact that the climate is not so severe in most of this region is another reason why the less complicated systems of heating and ventilating are used.

The system most generally used in the South is the steam or vapor source of supply with cast iron radiation. This is the least expensive to install and requires the lowest cost of maintenance, yet is quite satisfactory in its results. Low pressure steam cast iron sectional boilers are generally used and cast iron radiation is installed in the various rooms. In many instances the radiation is hung on the wall to facilitate cleaning the floor, and metal shields are often used on the classroom side of the radiator to prevent overheating of pupils seated near by.

In every section of the country one may come upon the old jacketed stove. Here, despite antiquated equipment, an activity program is being attempted.

When shields are used in connection with window deflectors for open window ventilating, a desirable result is obtained. The window is opened to the height of the window deflector and the radiation with the shield slightly higher than the radiator is installed on the outside wall immediately under the window. As the colder outside air comes in at the bottom of the open window, the deflector directs it slightly upward until it passes over the radiator and the heat from the radiator mixes with it. This gives it a sharp movement upward to the center of the room, thus breaking up air stratification and resulting in a circulation

of air that gives nearly uniform temperature through the room without drafts. To complete the cycle of operation exhaust ducts at the floor level from the opposite side of the room aid the air movement.

In using the steam or vapor modulation type of heating, semiskilled labor can be employed for maintenance. While the mechanical systems are unquestionably more positive and produce more nearly ideal results, such systems require some means of pneumatic or electrical temperature control. This brings up the requirement of a skilled engineer, not easily found in the South.

Water Feeders Automatic

In setting up the steam or vapor type of heating and ventilating, every care must be exercised to make the system as foolproof as possible. For instance, one of the most frequent repairs on low pressure cast iron steam boilers is cracked sections resulting from low water in the boiler. This has been largely overcome by the installation of automatic water feeders, which supply additional water to the boiler if for any reason it goes dangerously below the water line, and by the installation in the crown sheet of the boiler of fusible plugs that melt when the boiler water becomes dangerously low; the water, then, extinguishes the fire.

Because of negligence on the part of the janitor in removing the ashes at proper intervals, grate bars require frequent replacements. To overcome this, ash pits are usually constructed under the boilers in order to give greater depth for free air movement between the underside of the grates and the ashes. The ash pit also permits the use of a small quantity of water to kill any live coals or ashes.

It is also usual practice to install damper regulators connected by chains and pulleys to the bottom draft door and check damper, in order to maintain a predetermined pressure on the boiler while the boiler is not being attended. The cast iron boilers are, as a rule, oversized for the load to be accommodated and, as a result, the firing period may be extended to as much as four hours so that the custodian will not be required to spend too much of his time in the boiler room.

The Situation in the Southwest

J. FRED HORN

Director, School Plant Division
Texas State Department of Education

VENTILATION in the Southwest presents essentially the same problems as ventilation in other sections of the United States. Air change is just as necessary for children in Texas as for children in Chicago; temperature requirements are identical, and the humidity range is probably the same for comfort.

Washing the air to remove soot is not so necessary in the Southwest as in industrial areas where coal is used for fuel, but filtering and washing the air to remove dust and sand would be desirable in some sections of the Southwest, particularly at certain seasons of the year when dust storms are common.

The truth is, however, that little has been done to obtain freedom from dust in the schools of this section. Few "air conditioning" systems have been installed, although commercial buildings with such installations are the rule rather than the exception.

Since the newer systems of air conditioning are not generally available to public schools, the older and less expensive methods are used, if indeed the architect or the school officials think of ventilation at all.

Many of those responsible for the design of our school buildings consider that they have completed the job if they provide a fireproof (or what they term fireproof) structure and install a central heating system with steam radiators located in the spaces to be heated.

Current Ventilating Practice

However, the majority of the school people and the architects now recognize the fact that air movement and air change are essential to comfort. The usual method of installation with steam radiation is to provide an exhaust duct from each classroom to exhaust the coldest air through an opening near the floor and to provide a weir or wind deflector on the window stool over the radiator for controlling the introduction of new air.

Many of the schools in the Southwest are unable to purchase central heating plants and are, therefore, dependent upon individually fired space heaters. The principles of ventilation remain the same, however, and such space heaters are installed with the gravity exhaust flue and with a duct to bring the incoming cold air stream into direct contact with the heating element so that the air will be tempered before it is distributed over the room. Each such heating element is jacketed and insulated so that heating is by convection rather than by radiation.

Some installations of forced warm air systems have been made, but they are comparatively few in number. The more recent ones appear to be somewhat more durable than the earlier air furnaces and seem to have the advantage of obtaining quicker heat than do some of the other types mentioned. The principle of ventilation with these is, however, the same as for the other types, *i.e.* air movement, temperature and humidity control and provision for the bringing in of 40 per cent of fresh air.

Many Gas Fired Heaters Used

The Southwest uses many gas fired space heaters. A gas fired heater is the same old heater with a more easily transported fuel, nothing more; hence, the provision for ventilation is the same as for wood or coal fired heater or a steam radiator. The exhaust flue and the tempering of the incoming cold air stream are needed whether the gas is the usual natural gas from the utility company line or the liquefied petroleum gas distributed from a storage tank on the premises.

Orientation of the building so that as many as possible of the classroom windows are in the direction of the prevailing breeze assists materially in securing good ventilation during the warmer months. By installing several pivoted sash in the corridor partition of each classroom cross ventilation is aided.

Until the taxpayer is willing to pay the cost of installing full air conditioning systems in the schools to make them comfortable, the children of the Southwest will continue to use the time-honored methods outlined. And, after all, these methods appear to be successful.

In many parts of the West and South open window ventilation, combined with direct radiation, answers school needs effectively. The building at the left is Ivy School, Monrovia, Calif., showing the window arrangement, the shelter corridor and rear patio.

Current Practice on Pacific Coast

JOHN J. DONOVAN — **Architect, Berkeley, Calif.**

AN OUTLINE of the progress and status of school heating and ventilation on the Pacific Coast would begin with the old-fashioned, air-tight stove. The stove eventually acquired a metal jacket, a long smoke pipe and, then, a bucket of water, referred to as the "humidifier."

In due course of time there followed the hot air furnace with its fan, air chamber (fan room) and latrines. The fan was supposed to have a fresh-air intake just off the play yard so it could force fresh dust into the several rooms but, more often than otherwise, it relied also upon the latrine. This is not meant to be funny, for it is exactly what was found in 1912 when I started to serve as architect for a highly respected board of education.

Next we turned to steam boilers, direct radiation for heat and tempered air for ventilation. It didn't take the West Coast long to realize that the dual system was expensive. It cost from 20 to 24 per cent of the total cost of the building and more when an air washer was used. That meant that, if we built a $100,000 school building, the heating and ventilating costs would be between $20,000 and $25,000.

The Pacific Coast climate, except in the Northwest where in some instances mechanically ventilated systems are still used, makes it possible to use direct radiation and open window ventilation effectively. The cost of this heating and ventilating system ranges from 6 to 7 per cent of the total cost of the building.

In some places in California where the summer temperatures are high, it is obligatory to provide air conditioning for school auditoriums. In any event, auditoriums and lecture rooms seating 100 or more should have mechanical ventilation. Very often these rooms must be darkened completely and this means that windows are closed and shades and draperies drawn. A closed room and a tiresome speaker are conducive to slumber.

The chemistry laboratory needs a ventilating system of its own. In fact, it should have two exhaust systems, one with an outlet at the floor to remove heavy gases and the other with an outlet at the ceiling to remove lighter gases. Ducts should lead to the attic and there be connected with a fan and exhausted to the outside atmosphere.

The second exhaust system is needed to take care of the fume-hoods on the pupils' and the instructor's tables to remove the gases and odors when hydrogen and chlorine experiments are being conducted. The lead-off ducts from the tables should be placed under the floor and the construction so arranged as to receive them properly and to keep them out of sight.

For both systems the fans should be controlled at the instructor's table or station by means of electric switches. Pilot lights indicate whether or not the fans are operating.

A similar setup is needed in other science lecture rooms, laboratories and storerooms where unpleasant odors prevail, such as the physiology and zoology departments.

When the ducts are of metal (not less than 20 gauge galvanized iron or 16 oz. copper is recommended), they should be dipped into a trough containing acidproof liquid for one or two hours. Burnt clay products are recommended for use up to the vertical metal ducts concealed within the corridor or exterior walls.

Coal is rarely employed as a fuel on the West Coast except in sections where freight rates are low and coal is cheap. The usual fuels are crude or distillate oils and natural gas. Electricity has been tried but found wanting because of cost. Our records show that the use of electricity for heating purposes for school buildings is from two and one half to three times the cost of crude oil, depending upon the location of the city in which the school building stands.

In gymnasiums and shop buildings the unit heater is best. These units are placed at the corners of the room facing diagonally about 10 or 12 feet above the floor. Each unit heater is provided with a fan and the heat is that of steam from the main lines.

In order to have proper heating and ventilating systems in school buildings, it is desirable and profitable for owner and architect to employ a mechanical engineer who specializes in that work. Give him

the responsibility, work with him and hold him responsible for the installation's working properly.

Another recommendation is equally important. Custodians need good training in heating plants so as to run them properly. Many a good installation has been nullified by the political appointee custodian who could not read a steam gauge.

Superintendence and inspection of heating and ventilating plants, even for small buildings, should be done thoroughly.

In California the state statutes require that all new or remodeled school buildings costing more than $4000 shall have a full-time building inspector, whose wages are paid by the school district. He is employed by the board and must be approved by the state division of architecture.

That law has proved a blessing in many ways. Also, the architect, the structural engineer, the inspector and the contractor must file every three months and at the completion of the work notarized statements that that which has been incorporated in the building is in accordance with the plans and specifications or properly authorized change orders approved by the board of education, the architect and the state division of architecture. This is one reason why California is getting finer, better and safer school buildings today.

Trends in the North Central States

I. O. FRISWOLD

Director, Buildings and Business Administration
Minnesota State Department of Education

TODAY reliable and complete records of school building costs, valuations, equipment and physical condition are lacking in the various states. It is to be expected, therefore, that available information concerning current provisions and trends in the heating and ventilation of public school buildings in the North Central States of Iowa, Minnesota, Nebraska, North Dakota, South Dakota and Wisconsin is insufficient to enable anyone to present at this time an authoritative overall survey of this field. Because of this limitation the following report is based in large part upon my own personal observations and opinions and should be regarded as such.

Iowa, Minnesota, Nebraska and Wisconsin have no statutory specific requirement for the heating and ventilation of public school buildings.

North Dakota statutes, however, require that plans and specifications for new school buildings shall not be approved by the state superintendent of public instruction unless they provide for "at least 200 cubic feet of air space for each pupil accommodated," and "for at least 30 cubic feet of pure air every minute per pupil warmed to maintain an average temperature of 70° F. during the coldest winter weather." Moreover, "facilities for exhausting the foul or vitiated air therein shall be positive and independent of atmospheric changes."

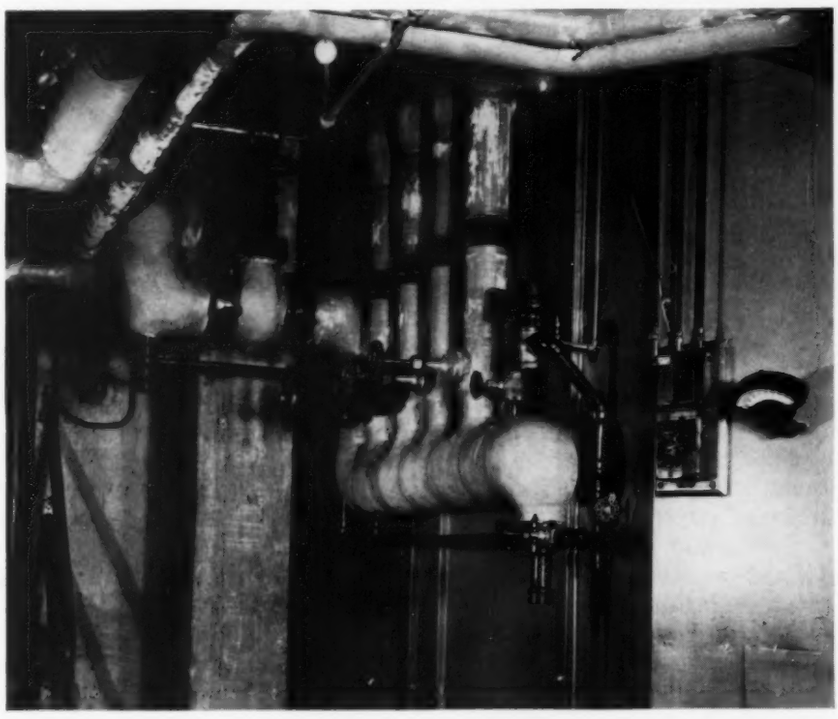
South Dakota has a similar statute, which specifies that "schoolhouses shall have in each classroom at least 15 square feet of floor space and not less than 216 cubic feet of air space per pupil and shall provide for an approved system of heating and ventilation by means of which each classroom shall be supplied with fresh air at the rate of not less than 30 cubic feet per minute for each pupil and have a system of heating capable of maintaining an average temperature of 70° F. during the coldest weather."

In Iowa it is required by statute that every standard school, before it may be designated as such, shall have among other things an adequate system of heating and ventilation. It is estimated that about 30 per cent of the rural schools now meet heating and ventilating requirements of the state department of education.

Although no specific requirements have been prescribed for mechanical ventilation, about 85 per cent of the town and city school buildings have some form of ventilating system in conjunction with their heating systems. It is estimated, also, that probably not more than 45 per cent of these are satisfactory and in good working order.

Nebraska neither by statute nor by rules or regulations prescribes requirements for the heating and ventilation of public school buildings. It does require, however, that a standard school classroom must contain not less than 200 cubic feet of air space for each child in attendance and that a jacketed stove or a basement furnace must be provided.

Minnesota statutes require that plans and specifications for public school buildings must be approved by the state board of education but they do not specify any of the requirements for heating and ventilation. These are found in rules and regulations of the board applying directly to physical plant provisions



These pipes and valve controls make an interesting pattern in abstract design.

or to the standardization and classification of schools.

The process of upgrading the heating and ventilation of public school buildings through the Minnesota State Department of Education has been in effect for several decades and nearly all of the 6962 rural school buildings now in use are reported by county superintendents to have approved systems of heating and ventilation. Only 51 of the 661 graded elementary and high schools do not meet minimum heating and ventilating requirements.

It is not unlikely, however, that this picture is optimistic, to say the least, and that not more than one half of the school buildings have heating and ventilation equipment which meets acceptable modern standards of excellence and which is operated and maintained in a satisfactory manner.

Wisconsin through its industrial commission and state department of education has set up machinery as effective as any and more effective than most states to obtain approved systems of heating and ventilation in school buildings.

It is estimated that in Wisconsin 85 per cent of the city and larger school plants and about 50 per cent of the rural school buildings meet present code requirements.

The following statements regarding the heating and ventilation of public school buildings in the North Central States appear to reflect present conditions and trends for the immediate future:

1. Rural school buildings are generally supplied with gravity warm air furnaces or jacketed circulating room heaters. From four to six air changes per hour are obtained in classrooms. Mechanical oil burners and stokers are replacing hand-fired wood and coal burning furnaces and natural draft, gravity feed, oil burning and circulating room heaters are replacing wood and coal burning units. When electricity is available, mechanical systems of heating and ventilation are replacing gravity installations.

2. In village and city schools stokers are replacing hand-fired boilers; low pressure are replacing high pressure steam plants; automatic temperature control is replacing manual control; two pipe steam systems are replacing one pipe systems; central fan systems of ventilation providing for the recirculation of from two thirds to three fourths of the air delivery are supplanting installations designed to introduce and vent 100 per cent of the outside air; filters are supplanting air washers, and in new construction and in the remodeling of gravity warm air installations the trend is to provide unit ventilators instead of central fan systems. Split systems of heating and ventilation predominate.

3. The interest and information of public school officials in proper heating and ventilation are increasing. Requirements that were once accepted without question, particularly for ventilation, are now being questioned, but it is generally agreed that gravity window ventilation is not an adequate substitute for mechanical systems.

The old theory of ventilation based on the chemical composition of air has been discarded; satisfactory temperature, air movement, humidity and cleaning of air are now accepted as the objectives to be sought but 30 cubic feet per minute of air per pupil is still generally required for ventilation. Little progress has as yet been made in obtaining proper relative humidity in classrooms. The need for more effective operation and maintenance of heating and ventilating equipment is generally recognized and some noticeable progress has been made in this respect in recent years.

4. The tendency definitely is in the direction of more rather than less state control of heating and ventilating provisions in public schools.

This very pleasant classroom boasts a well-designed unit ventilator. This device draws in air from the outside through an opening in the wall under the window. If the air is unclean, it is filtered on its way through the cabinet. The air passes around a heating coil and then is discharged upward to the ceiling, whence it diffuses across the room and downward and finally is exhausted through a grille.

The Great Lakes Region Reports

GEORGE L. SCHULZ Assistant Director, Department Buildings and Grounds Board of Education, Detroit

WHAT are the proper conditions that a well-designed heating and ventilating system should provide? Certainly, uniform temperatures should be maintained as a first requisite in the design of any heating plant. The problem of introducing a sufficient number of air changes to maintain proper atmospheric conditions within the rooms also must be considered.

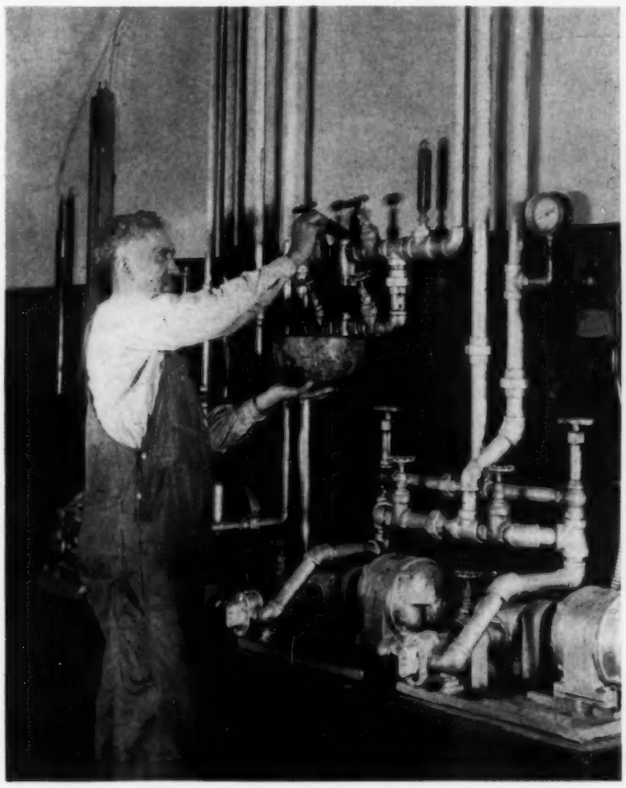
How these conditions can be best obtained is a highly controversial question for many factors influence the judgment of those interested in the problem. The individual reactions of those observing the operations of the different types of systems are naturally influenced by those active in the promotion of a given product. However, there seems to be a common ground on which most heating and ventilating experts agree, *i.e.* that rooms should be heated by radiation in the room, that radiation should be supplemented by the introduction of tempered air for conditioning purposes and that both should be controlled by a well-engineered temperature regulating system.

In the Great Lakes region many types of heating and ventilating systems have been tried. Among those most in evidence are the overhead duct system using a central fan unit, the underground plenum chamber served by a central fan unit and the newer individual room unit heater. In most cases the ventilating units are supplemented by direct radiation in each room.

Also, in the consideration of these various systems of heating and ventilating the cost factor is of major importance to every school district faced with the problem of providing additional building facilities. When one is confronted with the necessity of curtailing construction costs, naturally thoughts go to analyzing which system of heating and ventilating is most economically installed. However, in the analysis of costs involved in installing any given system, consideration must be given to more than the cost of the mechanical equipment.

General building costs are greatly affected not only by the type of mechanical system to be housed but by the method developed by the mechanical engineers for the installation of any given system. A heating and ventilating contract may indicate a low percentage of the total cost of a school and still result in an expensively engineered building owing to the amount of space required for the housing of the mechanical equipment.

Any mechanical plant requiring an excessive amount of building to house equipment is an expensive plant even though the costs do not reflect themselves in the mechanical contract but are included in the construction of excess building where they are hidden.



John, the engineer, is here engaged in cleaning the filters from the lead-in pipes for the oil reservoir in the school yard. Note that the pipes are at a good working height; too, they are located just opposite the main boiler. Oil is the choice of fuel in most schools where the price permits its use, because of its cleanliness. Too, its use frees the engineer or custodian for other jobs about the school building.

One of the strongest arguments for the installation of an overhead duct system of ventilation with a central fan supply unit has been the proclaimed saving of building space possible in utilizing attic spaces for plenum chambers and duct work. This system requires the construction of a fan room, which can be placed above grade and which generally is placed on the roof. The recirculation problem being of major importance for the economical operation of the plant necessitates the ducting of the air to its outlet and forcing it back to the central fan unit by static pressure.

Though no doubt economically installed, this system is by no means entirely satisfactory; maintenance and control are no small problems to contend with as the equipment is placed in widely separated locations.

A widely used system of heating and ventilating is known as the split system. It uses direct radiation as the heating element and a central fan system and basement plenum chambers supplying tempered air to the rooms as the ventilating medium.

This system requires the construction of basement fan rooms and air-tight plenum chambers as central air distribution centers and pipe trenches for radiation piping. It involves the introduction of fresh air from the roof by means of a fresh air shaft carried to the basement fan room. Air is sucked through a sheet metal fan housing containing temporary coils, air washer and retempering coils and is discharged into an air-tight plenum chamber from which it is forced through vertical sheet metal ducts to the various rooms of the building by means of a static pressure built up in the plenum chamber. Air forced into the rooms

is vented into an attic space provided, from which the air is either vented to the outside through ventilators or recirculated again by means of mixing dampers to the fresh air shaft.

Air introduced into the building after passing through the tempering coils and air washers no doubt tends to maintain health conditions of the school at the highest plane. The direct radiation is designed to maintain room temperature and to pick up outside heat losses along the exterior walls while the tempered air introduced at the inside wall about 8 feet above the floor is vented at the floor level, thereby removing the foul air and maintaining clean air conditions within the rooms.

To maintain proper temperature levels all radiation is thermostatically controlled, thereby controlling the flow of heat to all heating units. The air introduced into the room is maintained at a constant temperature by means of a heat regulating system installed in the fan unit.

Though somewhat costly to install, the split system is considered positive in action and fairly economical to operate. The maintenance charges of a system of this type are low and, as a general rule, all equipment can be easily serviced.

The development of the individual room unit heaters has introduced a comparatively new development in heating and ventilating. It involves in a great measure the same principles as developed for the split system, *i.e.* the installation of direct radiation to care for the heat losses and the installation of a unit heater in each room, which takes fresh air directly from the outside, tempers it and introduces the air supply to the room at the window. The air of the room can be either exhausted to the atmosphere by means of vents placed along an opposite wall or recirculated by passing through the unit heater by means of a mixing damper in the unit, through the unit air filterers and tempering coils and thence into the room again.

This system of heating and ventilating eliminates the necessity of providing large fan rooms and plenum chambers but introduces small individual motor driven and thermostatically controlled air conditioning units into every ventilated room in the building. Considering the initial capital cost in the construction of any school building, this system of heating and ventilating would materially lower general building costs without materially affecting the mechanical contract costs. It would appear that this system consisting of many small air conditioning units in place of the large central fan system accomplishes the same general results but it does introduce the problem of maintaining many small motor driven units as against the maintenance of large motor driven ventilating systems. The consensus in the Great Lakes region is that there is much to be said about each system as each has strong and weak points.

New England's Needs Are Listed

JOHN E. NICHOLS

Supervisor of Buildings and Plans
Connecticut State Department of Education

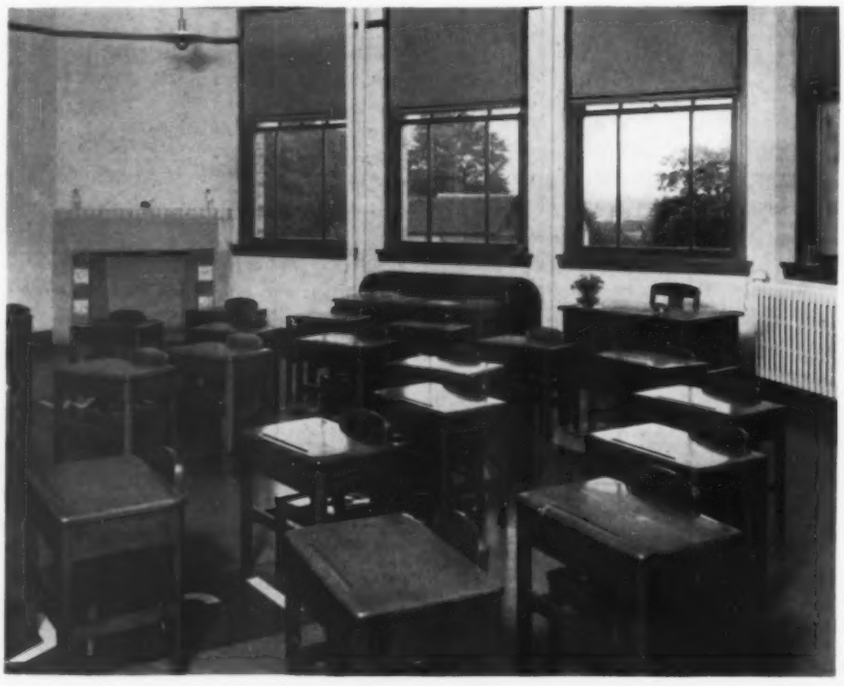
IN ALL parts of New England schools have been built with heating and ventilating systems that certainly provided the architects with abundant opportunities for self-expression. They were, doubtless, marvels of applied theory, characterized by mixing chambers and air washers, ponderous blowers and miles of dusty duct work the ostensible aim and purpose of which were the production of perfection in healthful, pleasant atmosphere.

As the inevitable addition to each of these schools became necessary, it was usually discovered that the extension of its heating system along the existing lines posed such difficult technical problems or involved so great a cost that some other less expensive method had to be devised.

The net result has been the development throughout New England of hundreds of hybrid heating and ventilating systems, monsters which have in common their insatiable appetites for fuel, repairs and attention yet which give in return for these only uncertain and drafty warmth.

Although this is a situation that undoubtedly applies in other sections of the country, in New England it comprises much of ironical justice. For it was here that school builders first permitted themselves to be sold so completely on a bill of goods, the proposition that satisfactory heating and ventilating necessarily involved fanning each pupil with 30 cubic feet of fresh air each minute.

New England's heating needs are probably entirely similar to those pre-



Heating and ventilating needs are well taken care of in this cheerful classroom with its unit ventilator, its radiator and its log-burning fireplace.

vailing in the rest of the northern third of the United States. Except where chambers of commerce frown upon such an indiscretion, people are wont to boast a little about the fickleness of their particular brand of climate. In New England, there is certainly foundation enough for that claim to justify the closest attention to temperature control and to other devices and qualities that affect a system's ability to adjust itself quickly to sudden changes in weather. A heating system must be able to function satisfactorily between wide extremes of outdoor temperature, operating with equal efficiency in dissipating the chill of autumn or combating bitter January gales.

The system that, in general, best meets those specifications and, as a result, is most widely used is any of the variations of the low pressure, two pipe steam system employing thermostatic radiator traps. In small buildings, when the design permits, gravity returns may be used with alternating receivers or condensation pumps. In larger buildings, however, efficiency necessitates the use of vacuum pumps.

Actual layouts vary from overhead supplies and trenched returns in small schools with first floor slabs on grade to ordinary basement main layouts in those buildings that have basements, pipe trenches or crawling spaces beneath their first floors.

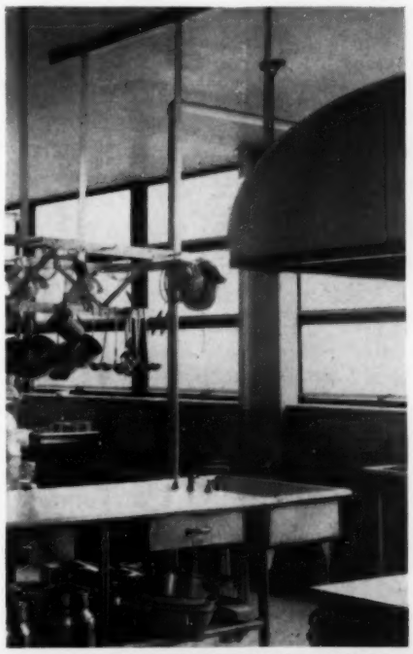
In a number of cases forced hot water systems using relatively high temperatures are giving entirely satisfactory results even in comparatively large buildings. However, the principal objection to such a system is the damage that may be caused it and the building by a power failure or by a breakdown in a climate in which such an occurrence can lead to a disastrously quick freeze-up.

The use of forced warm air, or the so-called "air conditioned" systems, is negligible. Besides being developed to an extent readily applicable only to very small schools, it has many of the disadvantages of the blast systems already referred to, namely, their extensive use of dust carrying, fire spreading ducts and their lack of effective means for warming the air chilled by the large expanses of window glass found in all schoolrooms.

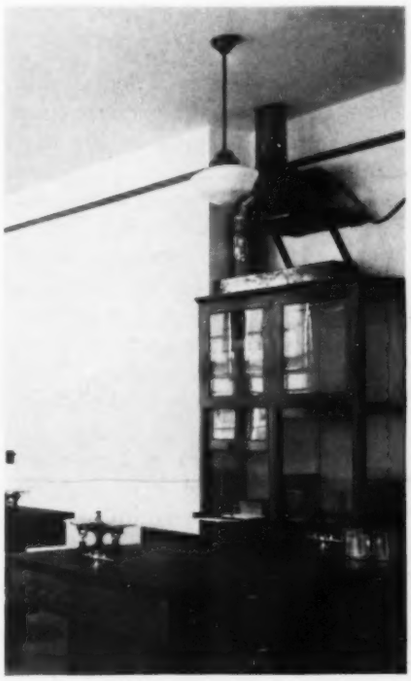
It goes almost without saying that in a cold climate far removed from natural gas and oil deposits, locally fired radiators and unit heaters are rarely used. Nor does the jacketed stove and pipeless furnace warrant serious attention.

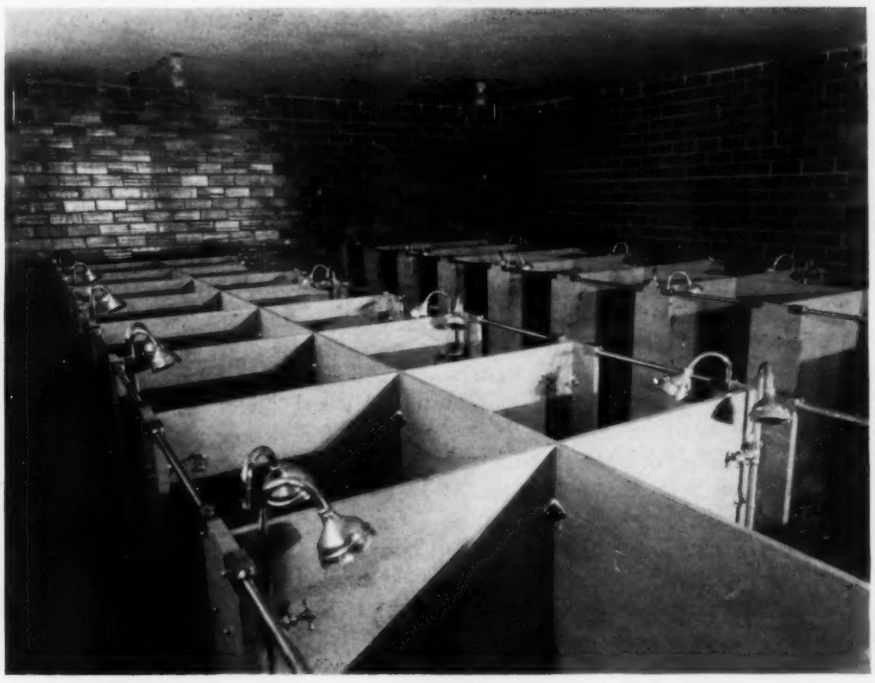
Although New England is far from its source of oil supply, it is not enough nearer to coal fields to give that fuel a decided price advantage. The continued greater proportion of oil burning installations may be readily understood, therefore, particularly in view of increased cleanliness and convenience and the freeing of janitorial services.

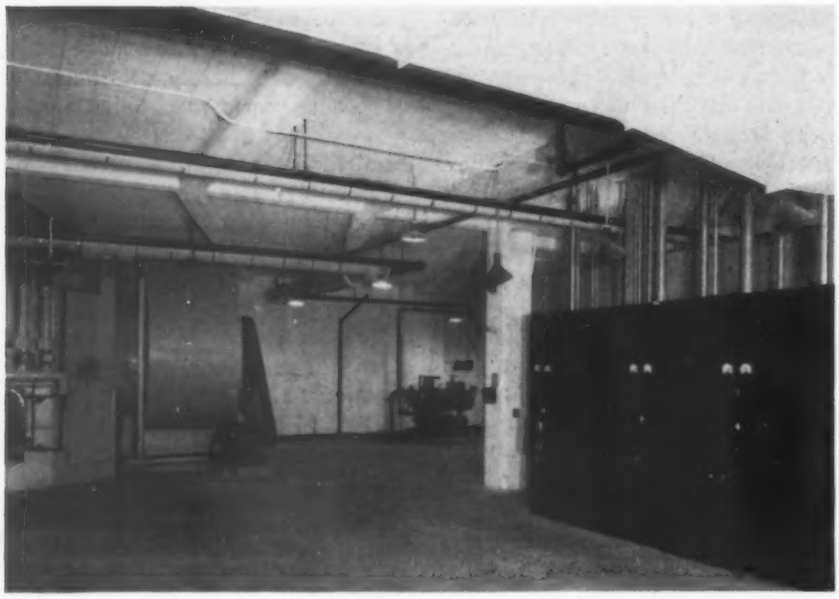
Oil burners have brought the benefits of temperature control to even the smallest and poorest of schools. Yet most old schools and many new ones are handicapped by inadequate control systems. Individual room control is effective if supplemented by night temperature regulation devices and is essential to unit ventilator systems. On the other hand, reasonably satisfactory results may be obtained by the use of motorized



Specialized school areas bring special ventilating problems. Among these are laboratories, kitchens, locker and shower rooms, examples of which are shown below and at right.







This clean, orderly boiler room has the further distinction of an acoustical ceiling.

valves controlled by strategically located secondary and master thermostats arranged to zone the system in response to varying heating requirements and to the demands imposed by community use of the building.

Turning to actual heat transfer devices, the ordinary slenderized cast iron radiator is the stand-by. It is wall hung for cleanliness, of course, and often is recessed and fronted by a shield to protect near-by pupils from radiated heat. There is some evidence, however, that convector units, which eliminate radiant heat and which are trim in appearance and readily built in with other equipment, may soon usurp the position held by cast iron radiation.

Unit heaters are admirably adapted to warming up quickly spaces that are used only intermittently as well as to heating gymnasiums and shops where a pronounced air movement and fan noise are not objectionable. Their use in auditoriums and classrooms does not prove satisfactory.

Unit ventilators, those neat metal cases that fit beneath the window sills, cannot be considered independently of ventilating in general. When large volumes of outdoor air are to be warmed and distributed throughout schoolrooms, the unit ventilator is probably the most effective instrument available. Its use, however, raises a question not of quality of performance but of the actual need and of expense.

The theory that large volumes of outdoor air were necessary formed the justification for the old blast systems. Research in the field of heating and ventilating indicates that proper temperatures and moderate air movement are the most important factors in comfort; that air change sufficient to carry off odors of occupancy (or body heat and moisture) is more than adequate for carbon dioxide removal and oxygen supply. However, even in the most unfavorable situations, from 10 to 15 cubic feet of air per minute per pupil, is sufficient to prevent odor accumulation. In the face of this, it is difficult to justify the expense of systems that are designed to heat all outdoors.

In all ordinary situations in New England it is probable that the comparatively simple window supply, duct exhaust systems of ventilation, used in conjunction with direct radiation, give greatest satisfaction. In rural areas and in very small schools gravity exhaust may be best. But in larger schools in which satisfactory maintenance is assured, low velocity fan exhaust provides a positive system the efficiency of which will not vary with wind and temperature.

For best results, however, such window supply, duct exhaust systems should have radiators that extend the full width of the windows under which they are situated; air deflectors on window sills to prevent the wind blowing on pupils, and sash that can introduce air into the room only at the sill, immediately above the radiator, where it can be quickly mixed with and diluted by the rising column of warm air. It is necessary that exhaust grilles be located on the sides of rooms farthest from the windows.

Although it has not developed to an equal degree in all parts of New England, there is a trend away from complex systems toward those that give equally satisfactory results and yet are far simpler and less expensive to install and also to operate.

Is Your Boiler Room Hazardous?

(*Continued from page* 39)

vided with operating devices from such locations. Controls, meters, gauges and kindred appurtenances should be properly lighted and should be located where they can be easily read and attended.

Check the location of firing and access openings to boilers to make sure that they are not obstructed or restricted by other equipment in the room. Soot and fly ash are factors in coal fired boiler rooms. See that access for cleaning is possible when these accumulate.

Provide exhaust pipes from safety valves to the outside. See that there are at least one hose cock and an ample length of hose with a minimum diameter of 1 inch. Do not consider this provision as something that can be added later. Build it in with relation to essential floor drains, which should be designed to trap sediment and to provide for easy cleaning.

Finally, plan the boiler room as a boiler room only with ample working space for the necessary equipment and storage for the necessary tools, but do not allow it to be used as a general storage space or a receiving room for the building. Insist that the boiler room be used only for its intended purpose.

If the boiler room is kept clean and if all equipment is in working order then there can be but one result: you will have a department in which safety becomes a habit with the attendants, in which accidents are at a minimum and in which operating failures are a novelty.

National Defense Enters College

E. D. WHITTLESEY
Cleveland College

Liberal arts colleges are "arming" for national defense by adding special courses, making their facilities available to the government and keeping alive the cultural values that are the fundamental bases of democracy

WHAT can liberal arts colleges do to aid in the national defense? Today that is more than a local question; it has international roots. Our Pan-American relations will be importantly affected by the answer. This nation's rôle in the economic, social and political maneuvering of the world, in addition to home defense achievements, will be determined by education's reply.

The rôle of bombers, tanks and other implements of modern warfare is obvious. The place of engineering colleges and science and research departments is fairly well understood, too. The place of colleges of arts and sciences, however, is not readily recognized. The National Council on Education and Defense has labored long and effectively over the answer to this question. Educators are familiar with that splendid answer. It is their duty to interpret it to the public in terms of specific curriculum activities, campus facilities or contributions of the faculty.

In a nation-wide study of 100 representative colleges and universities that has just been completed by the American College Publicity Association it was shown that liberal arts colleges are "arming" for this nation's defense just as the engineering colleges, schools of medicine and scientific schools are doing.

Seventy of the 100 institutions surveyed since August have faculty committees studying the problems of defense as they relate to education's future functions. Only one of the 100 has neither a committee nor a special activity devoted to national defense.

Heading the list of activities is a program for building student and community morale and conviction.

Institutes and forums are being planned. Events are scheduled that will give the community new knowledge that will be of major importance to successful individual planning. For example, one Middle Western college is offering a series of free lectures on "Problems in Hemisphere Defense." Speakers will explain the needs of various divisions of our military defense and will discuss the economic, industrial, geographical, cultural and political aspects of the situation.

New courses in political science, economics, sociology and history are planned. Old courses in literature and speech are being "democratized" to give students the special knowledge they will need in the battle of ideologies and "isms." There is nothing hysterical or sensational in these innovations. Flag waving is being studiously avoided and only the best interests of democratic philosophy are being considered in the changes. As one college expresses the matter:

"We should give thought to the improvement of our program as a college with proper emphasis on research, evaluation and long-term planning. Above all, we should pursue our tasks with calmness, thoroughness and supreme confidence in the democratic method.

"We believe that the informal education of our students is a major challenge. We recommend that some faculty member or a small committee be charged with the responsibility of obtaining information on social legislation of local, state and federal character. This implies that, through cooperation and the sharing of information, we can become more effective citizens."

Trained men are needed for the defense program because it is "big business." Conferences are being held with defense officials and with business executives everywhere to determine how the college program can meet the needs along the industrial front. In all these discussions, college administrators are keeping in mind the need for maintaining the usual high standards of instruction and scholarship.

To encourage uniformity of procedure among the colleges, Harvard University has developed a widely used plan of organization through its American Defense-Harvard Group.

Most of the planning, however, has not reached nation-wide proportions. A state-wide study of nutrition problems "in anticipation of future conditions that might arise from the present emergency" is under way at Alabama Polytechnic Institute. The alumni association of that institution has pledged the facilities of the institute to the government for use in the defense program.

Antioch College is making available its research and development facilities at the Antioch Foundry and is erecting a new building for foundry work in cooperation with General Motors.

Butler University requires sophomores to take a course in "American Government and Citizenship," and the National Foundation for Education in American Citizenship will give an award for the best student accomplishment in this course.

Cleveland College of Western Reserve University is expanding its broad adult education program of new courses, dealing with current political, social and economic problems, by offering short courses in "Straight and Crooked Thinking" and "Latin American Problems."

A serious study of Pan-American relations is being carried on by students at the University of Dayton and many colleges are expanding their offerings in Spanish, Portuguese and Latin American history. A course in "Current American Problems" is attracting much attention, too.

Conferences and institutes dealing with Latin American issues are being planned by the University of Indiana,

while Marshall College has recently concluded a conference on government problems and St. Louis University held a two day conference on "Democracy and Defense."

DePauw University now has an athletic program aimed at physical preparedness in which 80 per cent of its men take part. A committee of trustees and faculty of Hobart College is considering matters of student health and physical education. The physical education program at Miami University in Ohio has been given definite direction toward military training.

Refresher Courses Offered

Recognizing the needs of local industry, Massachusetts State College is giving refresher courses in engineering. Students are being trained in a variety of war-time occupations and the college is intensifying its research in food conservation, textile conservation, chemistry, bacteriology, civil engineering, lumber, pulp and paper.

Northwestern University officials point out that "the necessity for special short-time objectives in war does not release the universities from their long-time obligations to the entire learning group of the country. Moreover, it should be emphasized that modern warfare involves much more than the provision of fighting forces. Increase in efficiency in every department of the nation's social, economic and industrial setup is absolutely essential for the prosecution of a war under present conditions."

In addition to offering a six point training program that would develop naval officers, aviators, doctors and dentists, signal corps officers, administrative and Red Cross workers and technicians in chemical and ordnance work, the university has a large research program and is pointing up courses in more than a dozen departments and in the schools of commerce, journalism, music, speech and law to the needs of the defense program in the preliminary phases of its curriculum readjustment.

That this is not an emergency in which only the men may make a contribution is attested to by the response from the women's colleges.

From Russell Sage College comes word that the institution has worked out a national defense program for its young women that will prepare them for almost any civilian emergency, including running radio programs and public forums to keep the nation's morale high; they are also being trained in elementary nursing and food preparation.

Red Cross courses are now a part of the curriculum at Simmons College.

"Emergency Rationing," "Personal Relationships in National Emergency" and "Home Hygiene and Care of the Sick" are among the new courses offered at Keuka College.

At Connecticut College the students have an International Relations Club and a community chest to include some "war giving"; they also sponsor fellowships for foreign students.

Four Point Program Outlined

President Seymour of Yale divides the work of the liberal arts college, as it applies in a major men's university at the moment, into four parts: (1) research; (2) direct service to a specific activity of the government or of agencies set up by the national or state government; (3) the training of men, and (4) the field of ideas.

With regard to the fourth point, he writes: "I do not mean that the faculty should embark upon a campaign of propaganda nor that in an effort to combat the political philosophy of Hitler we should incorporate his methods in our educational institutions. I am not suggesting a witch-hunt directed against those whose ideas do not coincide with ours. The principle of freedom to express ideas is as sound now, in a period of emergency, as in normal times. . . . Appreciation of values becomes most intense when they are in danger. It is likely that the present emergency will revive faith in our American way of life and enthusiasm for its preservation and development. The universities must take the lead in this resurgence of conviction, which alone can give to the nation a unifying force."

Princeton University is stressing the health and physical education of students and is cooperating in much the same type of program as Northwestern and Yale.

Harvard University, in addition to the functions mentioned previously and the changes in its curriculum, has established, with the aid of alumni, the Harvard Public Health Unit for the study of communicable diseases in England. This unit, it is expected, will not only furnish valuable medical aid to the hard-pressed people of England but will also be in a position to acquire information of the greatest importance to the military and public health authorities of this country in the organization of mobilization and defense plans.

Western Reserve University has 63 courses of college grade in one division alone "for the preparation of business personnel in fields important to the national defense program." General classifications of these courses include accounting, economic and statistical analysis, marketing analysis and control, production management and control, and office management and office practice.

Among the realistic and dramatic programs reported is the activity at Colgate University. Four projects that are intended to develop a spirit of voluntary community service and to prepare students for participation in postwar reconstruction work are under way at Colgate. Some of the services included in this program are: felling and sawing trees and splitting firewood for country churches; constructing a picnic grove; planting trees; redecorating halls in villages near Hamilton; shoveling snow for the aged and indigent, and helping farmers who have fallen ill.

War Will Be Won in Man's Mind

There is hope that something of constructive and permanent value may emerge from the present calamitous world experience through the doors of our schools and colleges.

The futility of making great scientific gain without comparable cultural and spiritual achievements has been and is being demonstrated in repeatedly disgraceful episodes. This war must be fought with bombs, tanks and battleships, but it will be won in the minds of men. No nation can feel itself free until it can justify its position in the economic, political and social life of the world and in relation to the position of its neighbor.

Until that fight is won the battle of arms is never more than momentarily stilled.

Principals Tackle Football

DONALD J. BELL

Physical Education Teacher, Lodi High School, Lodi, Calif.

DURING 1939, football was seriously criticized as a sport in California high schools. Deaths and injuries provided impetus for adverse publicity. In order to bring the problem to a head, the state department of education conducted a survey of the conditions existing in the high schools. This was made possible through the cooperation of the principals.

The following answers to the questions that were asked in the survey represent the majority opinion of the 333 administrators who contributed to it.

Q. What are the unfavorable criticisms most frequently directed against high school football?

A. There are several: (1) death and injuries are ever-present hazards; (2) too much emphasis is placed on winning; (3) the game lowers sportsmanship and character standards.

Q. What is said in behalf of high school football?

A. Although a man's game, it offers valuable training to boys; its good features outweigh the bad; boys will play the game anyway on sandlots or under outside organizations, and there is nothing better to substitute.

Q. If the question were put to a vote, do you think high school football would be retained or discontinued?

A. In a recent poll, 274 principals voted to retain the game and 79 voted to discontinue it.

Q. Do you believe that giving awards and trophies and naming all-star teams should be limited?

A. Definitely. Awards to players should be limited. We should not place certain boys on pedestals by naming them on all-star teams.

Q. How can awards be made more commensurate with the rest of the educational program?

A. A state-wide system of awards for all of the high schools of the state should be worked out by the state division of physical education.

Q. How is your football program financed?

A. Gate receipts and school district finance.

Q. What method of financing a football program would be most in line with present educational trends?

A. All games should be free and the program should be financed by the school district in the same way as any other educational activity is financed.

Q. Is it desirable to have parents of football players sign statements indicating that they approve of their sons playing football?

A. It gives the parents a check on whether or not their son is playing but it does not absolve the school from any responsibility for the boy while he is participating in the sport.

Q. What steps should be taken to solve the problems of (1) community pressure on coaches to produce winning teams and (2) intense rivalry between towns?

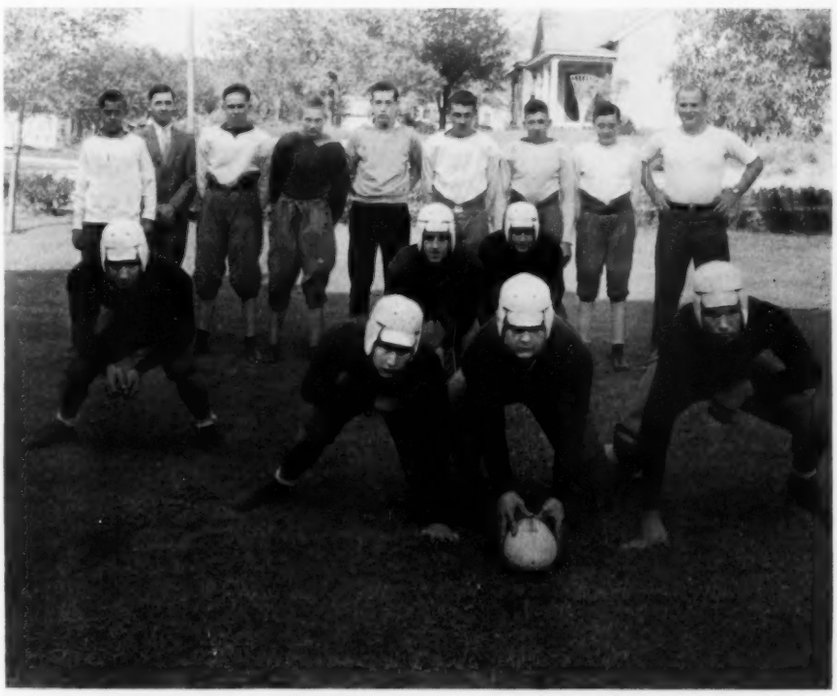
A. The football program should be entirely controlled by the school authorities and less consideration should be given to community demands and pressure. Less newspaper publicity should be given to this sport and more to other school activities. Administrators and faculty members should assume the responsibility for controlling the pupils during games. The public should be educated as to the proper conduct and aims of football. Pregame rallies should be limited.

Q. Has sportsmanship between schools and players been relegated to minor rôle and how can a better spirit be engendered?

A. Unsportsmanlike conduct has often been noted both in the bleachers and on the playing field. A system of sportsmanship standards should be developed and maintained. Exchange assemblies at which the president of each student body makes short talks to the opposing schools might help to create better feeling. If football gets out of hand it should be abandoned, at least temporarily.

Q. How can we manage the problem of transporting teams and rooters to and from games played away from the home field?

A. Rooters and players should be furnished with bus or train transportation under teacher supervision. Games involving remote distances should not be scheduled. Rooting



Six-man football has proved to be the solution for small schools that have too small an enrollment to permit them to compete with the large schools.

sections should not be taken to games. Schedules can be arranged so that each school plays the other twice, once at home and once away, thus affording the pupils an opportunity to see their teams in action.

Q. Do high schools reflect the attitudes and conditions existing in the universities and colleges?

A. "Aping" of the colleges is prevalent. High schools copy the songs and yells of the higher institutions of learning. They even try to copy the large scale commercialization of football as practiced on the college level as far as possible.

Q. Will you summarize briefly suggestions that may help to bring about a better football program?

A. The following suggestions from administrators in the field may help:

1. Football programs should be controlled and directed through the office of the principal. Matters pertaining to policy, conduct and travel should be the concern of administrators.
2. The state department of education should clarify its attitude and policy toward football to the schools and to the public.
3. The expenses entailed in financing the football program should be borne by the school district.
4. There should be no admission charge for games.
5. Less consideration should be given to community demands and pressure.
6. Football should be subordinated to the health and physical education program.
7. Reputations of coaches should be judged on the basis of their ability to develop character and sportsmanship among players rather than by the number of games won and lost.
8. Competition between schools should be equalized. Schools should play each other only when they have nearly the same enrollment.
9. No more than six or eight games should be scheduled for one season.
10. The practice period should not be shorter than ninety minutes or longer than two hours.
11. All play-offs and championships should be eliminated.
12. The rules should be modified periodically to suit high school play.
13. The "kick-off" should be eliminated in the interest of safety.
14. The best equipment should be mandatory.
15. Six-man football should be substituted by schools with enrollments of 200 or less.
16. A physician should be present at all games.
17. A medical examination should be mandatory for all players before they are allowed to participate.
18. Adequate insurance should be provided for all players.

Sportsmanship Pays

JAMES A. LEWIS
Superintendent of Schools, Dowagiac, Mich.

RECENTLY, T. V. Smith, former congressman-at-large from Illinois, lectured at Ann Arbor, Mich., on the topic, "Sportsmanship in Politics." He characterized the Hatch Act, by which the party in power restricts the activity of its many office holders in national elections, as the highest type of sportsmanship in politics.

The thesis set forth by Mr. Smith is gradually emerging in our social planning. Many illustrations can be given of restrictions placed by a group upon themselves lest they be overcome by their own activities. Major league baseball appointed Judge Landis after the Black Sox scandal. The movie industry called upon Will Hays to straighten out its affairs. More recently, professional football gave Elmer Layden unlimited power in regulating the league.

Does Mr. Smith's thesis have any implication for the administrator? Can administration impose limitations upon itself to safeguard its own interests?

A short time ago newspapers carried a story about a superintendent of schools who deliberately used this principle to forward his ideal of a democratic school. He quietly talked with all his teachers individually about the salary schedule. He finally came to an agreement with all his teachers as to what amount would be a fair maximum salary for the superintendent to expect under the existing schedule. Then he promised the teachers not to accept more unless additional finances were forthcoming. When the board of education considered his salary at its salary meeting, he reiterated his promise and emphasized that he was sincere in his belief that his salary had reached its maximum as long as the teachers' schedule remained as it was.

It is obvious that this superintendent put himself in a favorable light with school patrons, the board of education and the teachers by placing a limit on his salary. However, although his action appears to be purely altruistic on the surface, it is almost selfish on his part when his increased ease of operation is considered. The confidence engendered by this one move will eliminate many bothersome problems in his contacts with the public and teachers.

Sportsmanship in administration can be raised to a higher plane when the administrator takes a back seat and gives staff members, lay people and pupils the spotlight and fanfare. Case after case could be related of teachers who have written articles and theses, developed courses of studies and completed research only to have the administrator take the credit.

A great athlete once told a group of young coaches that if they expected to take all the credit for the games their teams won, they should also be ready to take all the blame when the teams lost. Similarly, the superintendent who wants credit for all the good practices in a school should be ready to take the responsibility for all the bad practices. After all, administration only justifies itself in the implementation it is able to give the teaching process. Individuals can be motivated to better and better teaching if they are given their just rewards.

"It is surprising how much can be accomplished if no one cares who gets the credit," someone once said. The schoolman who is truly interested in higher sportsmanship in administering his school might well incorporate that sentiment in his own philosophy. Perhaps he might change it to read: "It is surprising how much can be accomplished if no one cares who gets the credit *and* if someone takes care that the salary budget is equitably spread."

Pupil-Personnel Work

II—Effective Organization

ARCH O. HECK
Professor of Education, Ohio State University

IN THE preceding article pupil-personnel work was defined and the school services included within the scope of such work were enumerated. A renaming of the chief pupil-personnel services at this point, however, will serve to call attention to a most important problem in this area of school work.

These services include accounting service, counseling service, field service, health service, placement service, psychological service and special education. The problem to which I wish to call attention is how to organize these varied services so that they may most effectively serve the school children of a given district.

Several years ago a superintendent of schools in a city of more than 300,000 faced a serious problem of coordinating the work of his pupil-personnel agencies. The city school district had bureaus of attendance, of visiting teachers and of counseling, health and psychiatric service. Each bureau had a director who was directly responsible to the superintendent of schools. All problems that the director of a given bureau could not solve alone had to come to the superintendent.

A situation had developed in which each bureau was striving to build up a strong organization with little or no regard for the others. The attendance bureau, once it received a case, was loath to give it up despite the fact that it was clearly a visiting teacher problem. The visiting teacher bureau retained its cases despite the fact that they were health or clinical cases. The same attitude was apparent in each of the other bureaus. Jealousies had developed; cooperation was absent; friction was constant, and, instead of supporting one another, each bureau was undermining the influence of the others.

An analysis of the situation seemed to indicate that faulty organization at least encouraged the development of such attitudes. Each bureau had developed as an independent and fairly self-sufficient body. As a result, each considered itself fully competent to deal with all phases of a child's problem and constantly strove to develop its own facilities so that it would need no help from other agencies.

This is perhaps the natural result of having each bureau head directly and solely responsible to the superintendent of schools. A city school superintendent is a busy individual weighted down by responsibilities for buildings, equipment, teachers, community relations and finances. The problems brought to him by the bureau director for consideration are often technical and, because of their technical nature, a busy superintendent is too likely to accept the specialist's recommendations without sufficient regard to the effects of his decision on the other bureaus.

This means that an authoritarian rather than a democratic approach is taken in dealing with the innumerable problems facing these several bureaus. Each bureau decides how it is to function and what it needs in order to function thus. As a specialist's recommendation, this is taken to the superintendent who is too often inclined to put his stamp of approval upon the plan insofar as it does not seriously affect the budget. His approval is law; it may affect other groups adversely; it may not be most effective or most economical in the light of the work of other areas but

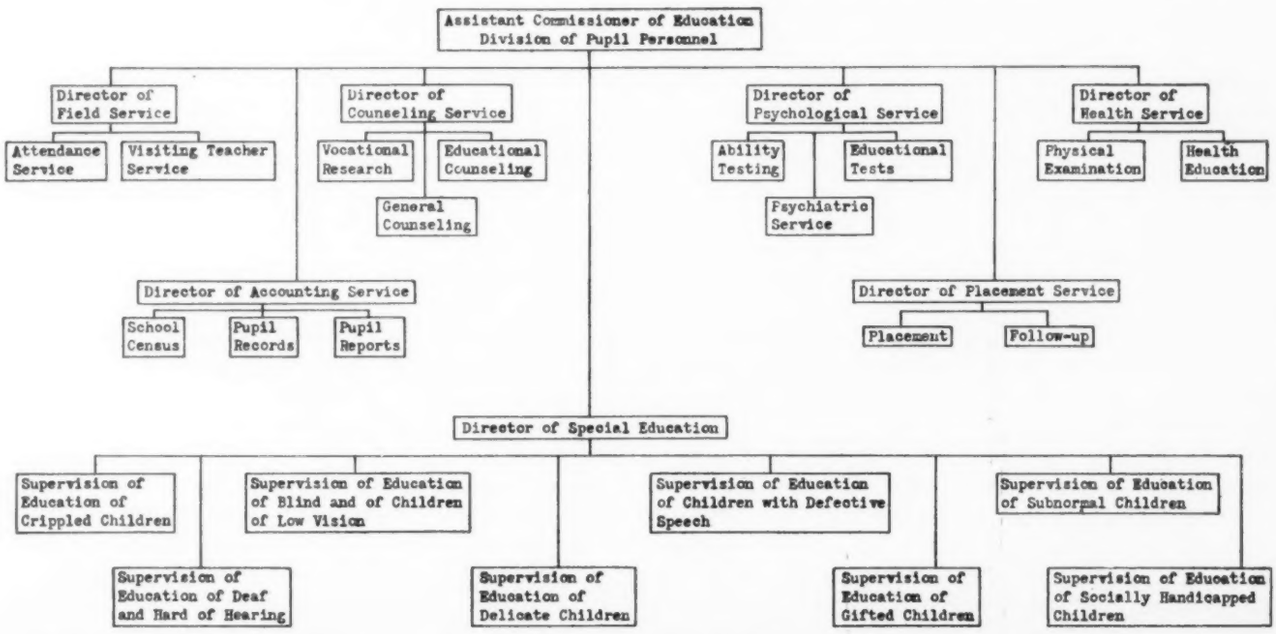


Chart 1.—Recommended state organization. Both charts are taken from "Education of Exceptional Children," Arch O. Heck.

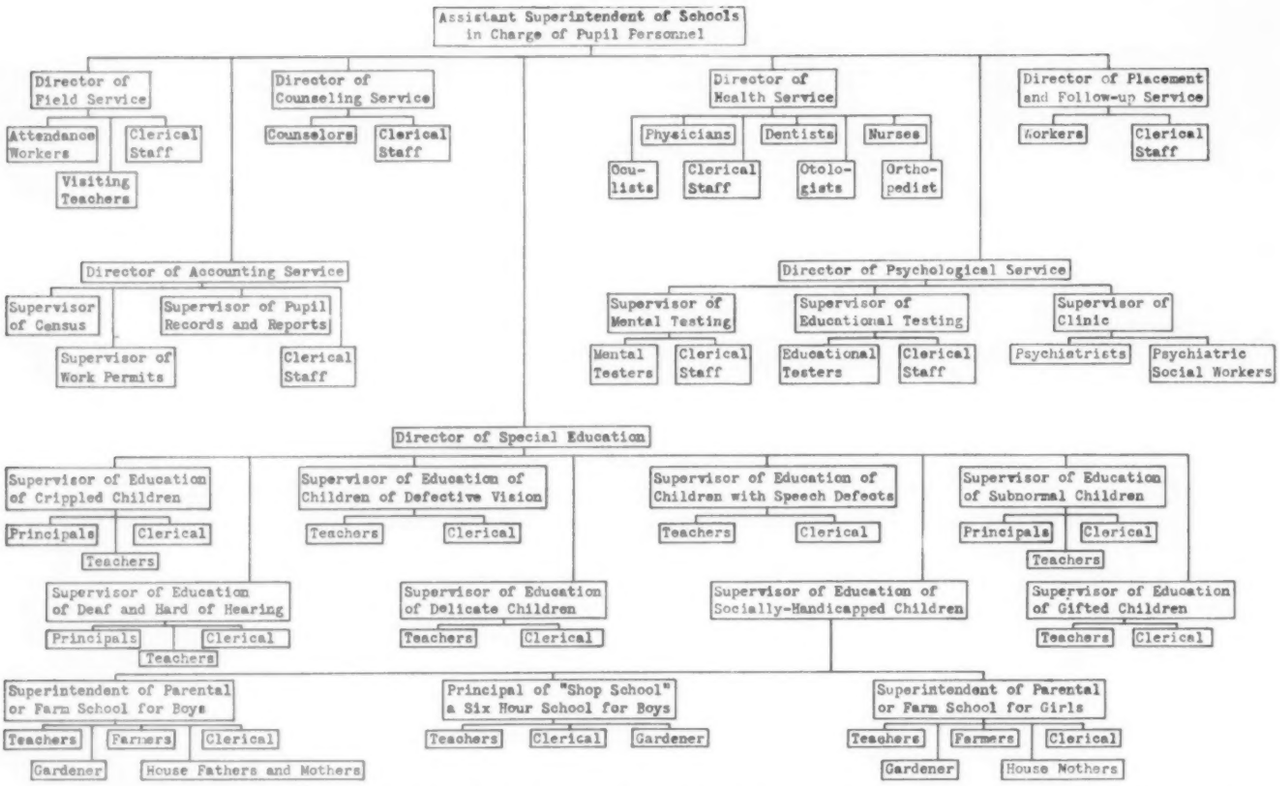


Chart 2.—Recommended organization for the administration of pupil-personnel services in cities of 500,000 or more.

the "royal" decision has been made.

To obviate these difficulties, I would suggest the development of another type of organization for all pupil-personnel services.[1]

The state should have a division of pupil-personnel with an assistant commissioner of education in direct charge of the division. Chart 1 shows the proposed type of organization. It should not be assumed, however, that every state, regardless of size, should have the administrative staff shown in the chart; the assistant commissioner in many small states would need only a limited personnel. He would, however, be solely responsible for all the functions suggested by the chart and for none other unless they are clearly pupil-personnel functions.

Furthermore, it should not be assumed that a large state should have all the personnel suggested by the chart if it is organizing these services for the first time. All the functions shown belong to the director, but personnel to perform them should be added only as the functions are so extensively put into operation throughout the state that additional staff members are needed.

Only the larger states with well-developed programs of pupil-personnel work would need the staff suggested by chart 1. The chart does not attempt to suggest all details relative to personnel but merely the broader relationships.

For cities with a population of 500,000 or more, the administrative organization for pupil-personnel services shown in chart 2 is recommended. Again, may I call attention to the danger of making the two assumptions noted in the preceding paragraphs. These charts should be considered as ideals toward which we move and not as a form of organization that should be adopted immediately by a given city.

Some cities of more than 500,000 population actually have a staff for pupil-personnel work as extensive as that suggested in the chart. Such cities would undoubtedly profit greatly by immediately adopting the type of organization shown in chart 2. Many other cities of this size should provide the personnel indicated only as they develop the functions suggested to the point at which the personnel is needed.

Both of these charts show the bureau of special education as a part of pupil-personnel service. At the moment this grouping is not general; a few cities, however, seem to be moving in the direction of relating special education more closely to their pupil-personnel agencies. The arrangement can be defended from several angles:

1. Special education aims more and more at helping handicapped children to adjust themselves so that they can return to regular classes at the earliest possible date. This idea should be related to the definition of pupil-personnel services that was given in the preceding article.

2. Because of their study of the home conditions and the out-of-school life of the pupil, field workers have such an understanding of the needs of the truant and delinquent that they are best able to make recommendations relative to the treatment that is necessary if the child is to adjust himself.

3. Psychologists know so well the needs of mentally exceptional children that the closest possible relation should exist between them and the teachers who are responsible for the special instruction of these children.

4. Health service is similarly related to the physically handicapped.

We must constantly remember that special education deals with that very

[1]For a more extended discussion of this proposal, particularly as it relates to the education of exceptional children, see Education of Exceptional Children by Arch O. Heck. New York: McGraw-Hill Book Company, 1940. Pp. 458-475.

small group of children who are so different from the greater part of the student body mentally, physically or socially that the regular instructional staff is unable to instruct them effectively.

If the type of organization suggested by these two charts were generally accepted by state and city school administrators for the organization of all pupil-personnel work, it would make possible a much more democratic type of control of these activities than is likely to exist under the old system of organization.

Under the new plan, one man would give his whole time to planning, coordinating and developing those services that the pupils need if they are to be aided in a well-rounded emotional, mental, physical and social development. Under this plan he could discuss with the staffs in each area of service their aims and objectives, the technical problems faced and the relation of their work to the work of other areas. He could bring together the staff members of the entire division to discuss mutual problems and he could meet with the various directors and help them visualize the larger problems of community relationships that they must solve if their work is to be most effective.

In these meetings the groups, as a unit, could ultimately work out a program acceptable to all; it would not be worked out by one person or one group, approved by the superintendent and arbitrarily, as far as other individuals or groups are concerned, put into operation. Each member of each group would have an opportunity to make a definite contribution to the development of the program.

Such a change in organization would afford the assistant superintendent in charge of pupil-personnel work an opportunity to develop his program upon a democratic basis.

The type of organization that is used in most cities at present almost forces the superintendent to develop these services upon an authoritarian basis.

I hope that a better understanding of this point of view will be achieved and that the new decade will see the adoption, by many state and local school systems, of some plan of organization similar to the one herein proposed.

Junior High Celebrates Birthday

MARTHA BUCHER

Central Junior High School, Kansas City, Kan.

SIX years ago plans were laid to make the twenty-fifth anniversary of Central Junior High School, Kansas City, Kan., a memorable year. Improvements in the grounds and the building that might otherwise have been put off indefinitely were planned to be completed for the silver anniversary.

First, the school setting needed beautifying. At a conference of student council members, science teachers and the principal, a five year project was laid out. Pictures were taken of the surroundings, blueprints were made and, finally, a local landscape gardener was called in. Drawings were made of the school setting as it should look in 1940 and 1941. That it does is to the credit of all concerned. The graduating class of 1935 left money to start the project; other classes and the board of education also contributed to the fund.

The building is located in the center of a rectangular plot between a sunken playground used by the boys and a leveled, hard surfaced bluff used by the girls. A rectangle was outlined within the larger rectangle by planting privet about 20 feet from the building and sodding the plot. Within this area maple trees and a few flowering shrubs were planted. The larger rectangle was outlined by the bridal wreath variety of spiraea, which flourishes in this locality, and irises and tulips. A stone retaining wall was built around the sunken playground and wide stone steps leading down to it were put in. The second rectangle was then hard surfaced so that it would furnish additional play facilities for the boys.

On the opposite side of the building the once ugly, rugged bluff was treated with a stone retaining wall hidden by a row of elms. Stone steps now lead to the play place, which was hard surfaced.

Next, a survey was made of the building itself. The school, with an enrollment of from 1350 to 1500, has a closed lunch period that operates in three twenty minute sections. The cafeteria is located on the ground floor. It was an unattractive, noisy place. This room became the setting for the first inside attack. Venetian blinds were purchased for the 23 windows. The art department cooperated by furnishing paintings for the walls.

Naturally, there was noise as hundreds of youngsters met to relax and eat. The remedy was to cover the ceiling with acoustical material. Low density tile resembling papier-mâché was purchased by the square yard. Being buff in color it blends with the painted walls and makes an attractive ceiling. The same material was also placed on the ceiling of a third floor classroom that is used for band practice and on the wide corridors running the length of the building. That the expense was justified is evidenced by the fact that this low density tile is now being placed in other buildings in the city.

Everyone agreed that a school that had pioneered as a junior high school deserved a birthday gift. Therefore, a double channel central sound machine in console form was purchased and placed in the principal's private office. Speaker boxes for the classrooms were made by boys in the woodworking classes. This machine permits recordings, a radio pickup and a program within the building to be received at the same time. It gives a large number of pupils a chance to learn the technic of radio broadcasting; it enables the school to use the best programs of the air, and it saves the clerk's time in making announcements.

Other features of the anniversary celebration included homeroom programs that featured the growth and the accomplishments of the school; the presentation to the orchestra of a Silver Anniversary March composed by the orchestra leader; a homecoming of all classes graduated from the school, and a souvenir edition of the school paper that contained 100 pictures showing the growth of the school. The entire community joined with the school in making this a year that will long be remembered by pupils at Central Junior High School.

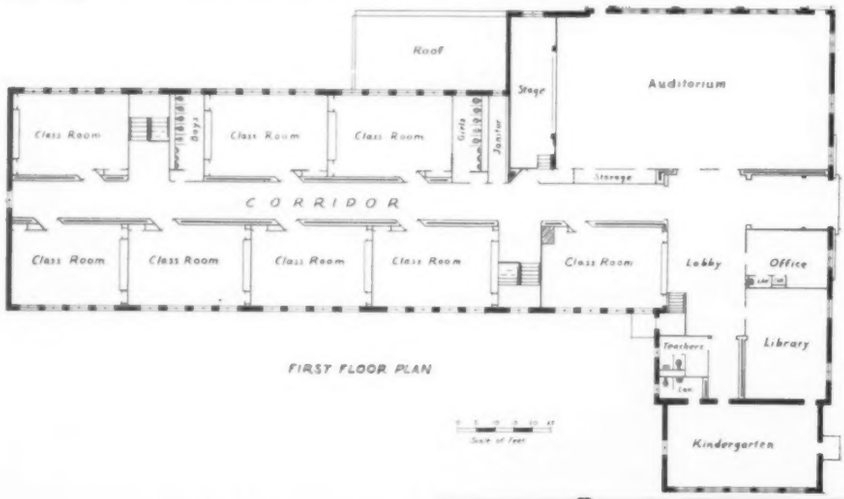
"Elementary" in the South

THE newest elementary school building in Lexington, Ky., was completed in February 1940. It provides a modern fire-resistant structure for pupils who were formerly housed in two buildings that were more than 50 years old. These old buildings were of wood joist construction, poorly arranged and difficult to maintain. The division of the old school between two buildings had many disadvantages. Operation was expensive because the maintenance of two heating plants made it impossible to furnish custodial service at a reasonable cost.

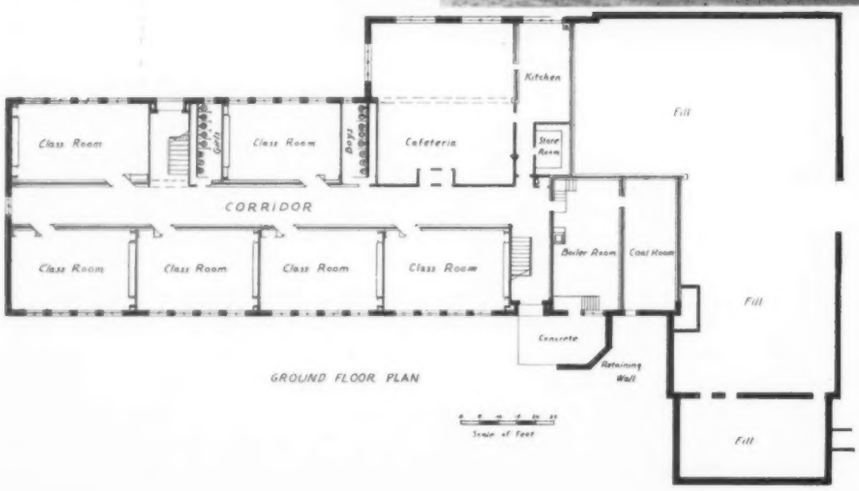
The new building, which includes 14 regular classrooms, a kindergarten, a library, a cafeteria and a combined auditorium-gymnasium, is located on a 4½ acre site that contains more than two and a half times as much playground space as the old buildings afforded. A 7 foot chain link fence surrounds the entire playground.

Taking advantage of a steep slope from the street level at the front of the grounds, the architect was able to plan the building with a minimum of excavation.

It was the policy of the board of education to spend only enough on external appearance to make the school attractive, with good lines and simple ornamentation. The greater part of the expenditures, it was decided, should be directed toward educational usefulness, safety and low maintenance costs.



Above: The plan of the first floor. The building contains 14 regular classrooms, some of which are located on the second floor; a kindergarten; a library; a cafeteria; an auditorium-gymnasium; a rest room for the teachers; the principal's office and storerooms, and several janitors' closets. The classrooms are 32 feet long by 22 feet wide and are almost identical. The cafeteria is equipped to seat 120 pupils but this capacity can easily be increased with additional tables and chairs. Ample storage space is provided beneath the stainless steel food counter.



Above: From the front the Johnson Elementary School looks like a one story structure because of the steep slope from the street level at the front of the grounds. The main front entrance leads to the second floor in the rear. Left: The ground floor houses the coal and boiler rooms. Heat is supplied by a stoker-fired boiler which also heats water for the cafeteria and the lavatories while the steam pressure is maintained. Blower units are used to heat the auditorium in order to make cleaning easier. The coal storage space will accommodate a year's supply.

Johnson School Lexington, Ky.

Architect OBADIAH BASS

Business Manager BEN B. HERR

Above: One of the classrooms in the new Johnson Elementary School.

CONSTRUCTION DETAILS

CONSTRUCTION: "T"-shaped, brick structure backed with hollow tile. Interior framework, structural steel. Roof, flat, 20 year bonded built-up; sloping, slate. Insulation, 4 inch continuous blanket of rock wool directly above top floor ceilings. Stairways, steel with linoleum treads. Windows, double hung with built-in weatherstripping. Door frames and moldings, metal. Cove base, asphalt tile.

Above: The kindergarten has its own entrance and is on the west side of the building. Right: The auditorium-gymnasium will seat 400. The stage is equipped with a velours front curtain and rep cyclorama, both of flameproofed material. Below: The library adjoins the principal's office and the kindergarten. A supply and work room is conveniently placed.

FLOORING: Classrooms and corridors, asphalt tile; cafeteria and kitchen, greaseproof asphalt tile; auditorium-gymnasium, maple nailed to pine subfloor. Toilets, terrazzo with 6 inch cove base.

WALLS: Corridors, buff colored tile. Auditorium-gymnasium, tile to height of 6 feet. Classrooms, blackboards and cork bulletin board on front and side walls.

LIGHTING: Stage, disappearing footlights that turn off automatically when closed.

HEATING: Stoker-fired, low pressure steel boiler. Wall-mounted radiators in all rooms except auditorium, which is heated by blower units.

PLUMBING: Wall-mounted closets with counterweighted seats. Wash basins equipped with slow acting, self-closing faucets.

COSTS: Total, $138,955.32 divided as follows: land, $8000; construction, $118,443.51; movable equipment, $5405.20; architect's fee, $7106.61. Volume, 520,000 cu. ft.

FINANCING: P.W.A. grant for 45 per cent of cost; remaining 55 per cent provided by sale of an old school site and from current funds.

Why Pupils Fail

ROBERT C. FAGAN

Supervising Principal, Hohokus Township Schools, Mahwah, N. J.

THE problem child or potential failure is not a "bad" individual to be treated as an outcast. He is a human being who has the misfortune to be hypnotized by a mistaken conception of the meaning of life. Scolding, punishment and rejection are not education. Education is an increase of awareness or understanding. An understanding teacher can accomplish in a short time what is necessary to correct the mistaken conception that is at the root of problem behavior.

The three main problems that every individual must face in this world are work, association and sex. The earth does not provide security and sustenance without useful activity. We must solve the problem of relationships with other people and we all face the problem of establishing relations with the opposite sex.

Must Work for Good of All

Mankind learned long ago to exist in groups for the mutual protection and advantage of individual members. One man alone found it impossible to accomplish all the tasks necessary for the security and perpetuation of the race. This struggle for security was accomplished by the division of labor. Only as each member did his part, was it possible to protect the group and the individual from the hostile forces of the environment.

This goal of common security can be attained most effectively when each person is friendly and interested in others. The result is called social interest and its fruit is cooperation in socially useful activities.

The problem individual is laboring under a one-sided understanding of social living. Owing to a restriction or a low degree of social interest the problem child is constantly seeking his own elevation and personal advantage at the expense of others through acts that show an unfriendly attitude toward fellow beings. Were he more friendly, he would not exploit those about him.

As teachers or administrators we must first look for the basic unfriendliness and strive to remove it by winning the friendship of the child and then by giving encouragement as one friend to another. It is futile to expect that any person will contribute greatly to those toward whom he feels no regard or interest. The first step in considering a failing pupil is to look for the lack of social feeling and find the mistaken conception that is responsible for it.

When there is a "blocking" in social interest, we may be sure that it appeared during the earliest years. Some mistaken interpretation of family relationships caused the child to feel "cut off" from the regard and sympathies of those about him. It may have come from too much pampering by parents, from physical handicaps or from neglect. The result is that the child tries to make up for what he lacked by being interested only in his own welfare, regardless of the cost to others. Since his interest does not extend beyond his own immediate advantage, he does not train himself to contribute to the welfare of the group. This is potential failure, for life demands contribution.

Let us consider some of the problem types that confront a teacher. The most conspicuous is the delinquent. This is always an active child who has no regard for the rights or welfare of others. Because of his high degree of activity, he comes into open conflict with teachers and the group. What he wants is the only law he knows. When he cannot get it, he takes it. Early in life he makes an open break with the demands of society. As he grows older and has more power at his disposal, his attacks become more telling and hostile.

Since he lacks social interest, he cannot agree with the aims of school and is interested in escaping the routine that is accepted by children who understand better the need for "being a part of life." Lacking interest in school, he fails in subjects and is humiliated and criticized. Soon, he seeks to escape this irritation by truancy. The hand of society is now against him and he lives as if in an enemy country.

This in no way develops the child's fellow feeling. Believing that everyone is against him, he engages each maturing faculty against society. He cannot be a part of that which he has not understood. Convinced that he is unable to gain significance and distinction as a citizen, he develops only those points of view and habits that will make him skillful in gaining his goal by exploiting authority, as exemplified by society. He feels superior to work.

The Road to Criminality

This mistaken idea, in time, leads him to criminality and prison. Forty per cent of all crime goes undetected, which means that many of these delinquents experience success, as they understand it, for years before they are detected. Punishment in prison, where they are associated with experienced criminals, does not increase their friendliness toward society. The successful teacher can find a way to make this child feel significant in doing socially useful things and can save him from criminality.

The timid individual is always in danger of social failure. He acts as if he believed that the "mountain should come to him." He lives all day like a mouse in a hole watching for the cat, as if he fears attacks and criticism and is more interested in protecting himself than in accomplishing something useful and necessary. Obviously, he is leaning on and exploiting others. Demanding overprotection and security, he limits his activity and his contribution and expects that people will be interested in him.

As long as the child remains in a favorable and sympathetic environment things go well. Should life toss him into a situation that demands contribution, he is almost certain to fail for he has never trained himself except for "defense." Again, we see the lack of social interest and its deadly, limiting effect.

The child with a high I.Q. is an unsuspected source of failure in life. Schools often develop the vanity and

The George H. Nichols School, Endicott, N. Y.

The George W. Johnson School, Endicott, N. Y.

The Vestal Central School, Vestal, N. Y.

In the auditorium-gymnasium of the Hooper School Addition at Endwell, New York, the Hard Maple floor does duty for athletics, dancing and assembly, easily takes all three. Gyms of other Schools shown are also Hard Maple Floored —all are designed by A. T. Lacey & Sons, Architects.

"For Over Half a Century, Hard Maple Floors for Schools"

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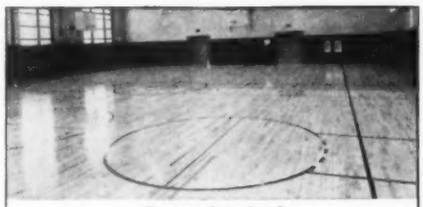

Gymnasium in the Vestal Central School

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conceit of these children by holding them up as shining examples. The child soon comes to believe that his I.Q. will always solve the problems of life without effort or social interests on his part. He becomes arrogant and proud until he is confronted by situations that demand useful activity and cooperation. These he has scorned as being beneath him.

However, the demands of society cannot be met and solved by anything as easy and as useless as superior attitudes. For this reason, we must guard ourselves, lest we allow such children to believe that intelligence is an end in itself, rather than a means for being socially useful.

The lazy child is another potential failure. He is a child who wants so much from life that he has not the patience to begin to climb toward his goal. Every "lazy" child is suffering from too much ambition. He wants success, riches and honor. But he is not interested in contributing to the lives of others; he lacks social interest.

Naturally, he is vain or he would not demand so much for so small an investment. He is among the first to tell of his handicap! If he is asked why he does not do as he should, he says: "I am lazy." In this way, he likes to create the impression that he could work wonders if he were not cursed by this disease. If he tries anything and does not succeed, it is his laziness and not he that is to blame. Thus, he uses it as a featherbed on which to fall, while in his imagination he pictures himself as invincible.

Then, too, teachers and parents may pay more attention to the lazy child. He is the topic of conversation and the target of much coaxing and pleading. Being burdened with ambition that he cannot appease, he craves recognition. Laziness gives him a "reputation" of sorts and as long as he is the center of attention he clings to the laziness that helps him maintain his favored position of irresponsibility. By utilizing this character trait, he gains indulgence and support without being burdened with the responsibilities of contributing to the welfare of society. Laziness cannot be cured until the social interest of the individual is increased.

The classroom bully is another potential failure. He lacks fellow feeling because he wants to get ahead of other children. The only way he has of proving his value is by suppressing others. Lacking the understanding to go ahead in socially acceptable ways, he substitutes the fiction of being more significant by suppressing those who are physically weaker. This is the useless activity of a discouraged, vain individual who does not understand that life means contribution to the welfare of the group. He sticks to this shabby imitation of courage only because he does not have the social interest to lead him to place his power at the disposal of the group. A few words from a friendly teacher can change the whole life of this misguided individual.

Still another potential failure is the classroom clown. Obviously, he is an attention getter. He acts as if he believed that success means to be looked at and admired. If the problems of reality could be solved in such a manner, we would agree with him and encourage his efforts! However, we know that he does it because he does not want to assume the responsibility for contributing to the group. Distracting attention from studies has no social value; hence, we cannot consider him friendly to the aims of culture.

On the contrary, he seeks the immediate gratification and cheap success gained by moving the class to giggles. Pampering himself in this easy way, he cannot develop the courage to make the effort to accomplish socially useful things. For this reason, we must consider him lacking in social interest and, therefore, among that large group of failures.

From this résumé we can see that each failure or potential failure has as a common denominator the lack of social interest. It is impossible to find one failure in life who has ever had a high degree of social feeling. For this reason, we, as teachers, must find ways to develop this quality in children.

Education is futile and dangerous unless we can help the child to feel imbedded in the aims of culture. When we have found a way to interest the child in the welfare of others, he will educate himself. All education, in the end, is self-education. The child is his own teacher; we can help him to find success experiences on the useful side of life.

Pupils Pay Respects to Pioneers

Pupils of McKinley Public School, Cincinnati, inspect the almost forgotten burial place of the founders of Cincinnati. The student council asked the Cincinnati Park Board to restore the old cemetery in order that due recognition might be given the pioneers who founded the community. Photograph by courtesy of the Cincinnati board of education and the Cincinnati *Post*.

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New Laws Affecting Teachers

M. M. CHAMBERS
Specialist in School Law

NEW state laws affecting teacher personnel, obviously growing out of the current crisis, include enactments to disqualify disloyal persons from teaching, to broaden and strengthen the teaching of the social sciences and to provide leaves of absence for teachers or other school employes to go into the military or other defense services.

Indiana took the lead in the defense emergency by providing that any and all teachers, school librarians, principals, assistant superintendents and superintendents in public schools of the state who have or shall have entered into the military or naval service of the United States or any allied or auxiliary war service, such as the Red Cross or Salvation Army, connected with the armed forces of the country shall be deemed to have been granted a leave of absence for the duration of such defense service. Such persons shall be automatically reinstated if they present themselves within sixty days after honorable discharge or release from the defense service.

Ensuring Teachers' Patriotism

On the touchy topic of ensuring that teachers shall be patriotic, opposite positions have been taken by the legislatures of different states. Arkansas declared that any member of a "Nazi, Fascist or Communist society," or any organization affiliated with such societies, is ineligible for employment by the state or any of its institutions or subdivisions. The act also makes it a felony to teach or advise the overthrow by force of any government in the United States or to print or distribute such teaching or advice or to join any society or assembly for such purposes. The penalty is a fine of up to $10,000 or imprisonment up to ten years, or both, and ineligibility for employment by the state or any of its agencies or subdivisions for a period of five years after conviction.

In Idaho a bill was introduced to make public school teachers officers of the state and to require them to take the same oath as other public officers; the same oath was also prescribed for teachers in nonpublic schools. This bill was passed in the house but killed in the senate.

Some progress toward raising the minimum qualifications of teachers and toward adopting modern principles of certification has already appeared in at least three states.

West Virginia revamped the certification law to abolish some of the certificates of lower grade, leaving the lowest elementary certificate based upon completion of at least sixty-four semester hours in an approved institution for the education of teachers. After 1942 this requirement will be ninety-six semester hours.

The new act also establishes two new certificates that will be valid in both elementary and high schools, based upon graduation from a four year required curriculum in an approved collegiate institution. Uniform state teachers' examinations are abolished. The complete law now contains provision for administrators' certificates based upon the master's degree. Its general tendency is to provide for certificates that are valid for five year periods and renewable upon evidence of professional growth, including additional study in approved institutions.

Arkansas provided for semiannual examinations for teachers in the counties to be administered by the chief county school officers as agents of the state board of education. Applicants passing the examinations will receive from the state board of education what is known as the state board county certificate. Present holders of first grade county certificates may have them automatically converted prior to Sept. 1, 1941. Thereafter, all authority for the issuance and renewal of all certificates will be vested in the state board of education.

Oregon authorized the issuance of limited special certificates to secondary school teachers already holding valid vocational certificates in agriculture, home economics or industrial subjects. These certificates enable the teachers to teach in not more than two fields of subject matter in addition to the vocational subjects. The new special certificate can be granted only upon evidence of training and fitness in the field or fields for which it is issued. It is limited to one year, with restricted renewability. After a teacher has held it for three consecutive years he is no longer eligible for such a certificate. Apparently, it is a device designed primarily to enable small rural high schools to effect a temporary solution of their ever difficult problem of offering a varied curriculum with too few teachers.

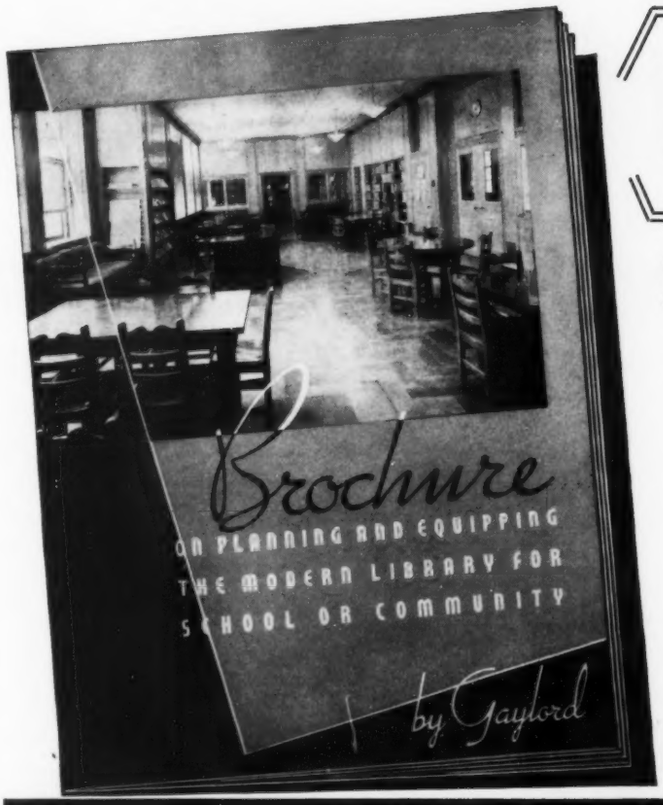
"Continuing Contract" Laws

The year 1941 seems to have brought a lull in the adoption of new state-wide teachers' tenure statutes, but there is a compensating activity regarding the so-called "continuing contract" laws in several states. This type of law merely provides that a teacher's contract shall be automatically renewed for the ensuing year if the board of education fails to give final notice to the contrary by a specified date, usually at or near the end of the current school year.

Arkansas enacted a continuing contract law that applies to all teachers, principals and superintendents, setting the date for automatic renewal of contracts unless notice of termination has been given as not later than one day after the close of the school term and in no case later than June 1.

Oregon enacted a continuing contract law requiring all school boards to notify all teachers and other employes of their appointment or dismissal for the following school year not later than March 15 of each year. In the absence of such notice, teachers will be deemed reappointed with no reduction in salary and may bring a mandamus action to compel the school board to contract with them for the following year. Teachers must notify the school board by April 1 of their acceptance or rejection of appointments.

Indiana amended the continuing contract statute to provide that proba-



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tionary teachers in school corporations under the tenure law shall be deemed to have been reemployed for the next year unless they have been officially notified to the contrary on or before the termination of the school term but in no case later than May 1. For teachers in the township school systems, where the tenure law is no longer in force, the continuing contract law is also effective and the official notification regarding employment for the following school year must come in no case later than five days after the termination of the school term.

Washington enacted a continuing contract law under which contracts of all teachers, principals, supervisors and superintendents will be automatically renewed for one year on identical terms with the preceding year unless the school board notifies them in writing on or before April 15 that their services will not be retained and states the reasons therefor. For union high school districts the deadline date is April 30.

The requirement that the board give reasons for terminating a contract is rare. West Virginia enacted a similar statute about two years ago. Some progress may be noted toward state-wide betterment of teachers' salaries. Indiana amended the state teachers' salary schedule, setting the minimum beginning salary for all teachers who have completed 144 or more weeks of professional training (four years of college) at $125 per month for a minimum term of eight months. For these teachers $2.50 per month is added for each year of teaching experience up to and including the tenth year. The new minimum for teachers with 180 or more weeks (five years) of training is also $125 and the annual increments through the tenth year are the same but are to be continued each second year thereafter up to and including the eighteenth year of experience until a maximum monthly salary of $160 is reached.

Arkansas established a special state teachers' salary fund designed to aid local districts in maintaining a salary scale ranging from $320 to $600 per year. Apportionment is to be made in such manner as to absorb the difference, wherever it exists, between the salary scale and the amount of the local revenues available for teachers' salaries. Each district must allocate at least as high a percentage of its base revenue to teachers' salaries as was done in the preceding fiscal year, except that the percentage need not exceed 65.

At least 75 per cent of all receipts above the base revenue must go to teachers' salaries, except that this provision shall not affect any revenues previously set aside to meet bonded obligations. If the amount available in the state teachers' salary fund is less or greater than is needed under this formula it shall be prorated.

The tendency to broaden the scope of existing teacher retirement systems continues to expand. Arkansas broadened the coverage of the teacher retirement system to include instructors and administrative employes of the state institutions of higher education and of the state vocational high schools; faculty members of the state schools for the blind and for the deaf; employes of the state board of education; the chief county school officers, and the administrative and clerical employes of local school boards on a regular salary basis.

Provision was also made for the admission of teachers who were in service when the system was established but did not become members, and also of teachers who had previously quit the profession after having taught twenty-five years in the state and after having reached age 60.

Washington broadened the coverage of the teachers' retirement system to embrace all noncertificated employes of public schools, including clerks of school districts and noncertificated employes of the state colleges of education and the state institutions of special and correctional education. All such employes may file a declaration not to become members of the retirement system within one year after the effective date of the act or within one year after entering the service. The disability benefit provisions were also amended to exclude part-time and substitute teachers, to eliminate the three year membership prerequisite for eligibility and to extend disability protection to $30 per month for two years.

Washington authorized school districts of the first class, at the discretion of their boards of directors, to make direct payments out of the funds under their control to retired superannuated or disabled teachers, irrespective of their status in the state teachers' retirement system.

If You Need Workers, Advertise

HARRY K. YOUNG

Assistant Vice Principal, Polytechnic High School, Riverside, Calif.

IT HAS been the experience of the personnel managers in most of the large California school systems that, in order to find the best type of employes, they must go out and seek them. Some personnel managers are still sitting and waiting for the best workers to appear. Others have found that posters, newspapers, mailing lists and even the radio are practical aids in attracting the best people.

"But," it may be argued, "if we do advertise what will our employment offices be? Right now there are more people applying for work than we can handle."

That may be true. It is true, too, that you will not get the best workers available by waiting for them to apply. Is it fair to unemployed workers not to publicize openings? Is it not a better policy politically to let everyone know that the schools are looking for the best possible candidates? The school systems of Los Angeles, San Francisco, Oakland, San Diego, Santa Monica and Alhambra have used all sorts of publicity schemes to recruit noncertificated personnel. The most widely used medium is the poster. Placed in conspicious places throughout the city or community, posters are invaluable aids to those seeking employment. Newspapers are always glad to run stories telling of employment possibilities.

Even those who do not believe in the necessity for advertising openings have a responsibility to the taxpayers to obtain the best workers.

The facts used in this article are based on a survey of employment conditions of noncertificated personnel in 24 California school systems.

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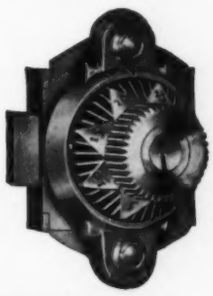

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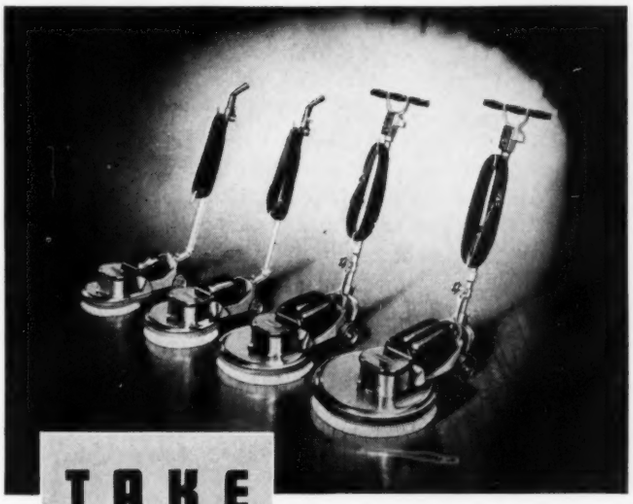

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Some Facts About Nutrition

MILLICENT ATKIN

Director, Home Economics Department, Irradiated Evaporated Milk Institute

NO PHASE of the problem of human feeding deserves more critical application of our knowledge of nutrition than does the school lunch. Throughout the period of growth the quality of the diet is of the utmost importance to skeletal development, tooth structure, the integrity of soft tissue and, indeed, to the mental progress of the child.

Another entirely different, but equally pressing, reason impels careful scrutiny of the school lunch problem from the nutrition standpoint, *i.e.* the recognized fact that the majority of children included in school lunch projects come from low income families. Thus, the problem is complicated by inferior nutrition at home. How much simpler the school lunch problem would be, if it could be assumed that the child's other two meals were carefully selected and properly prepared. Unfortunately, such a situation is not found in the majority of low income families. The school lunch must supply the greater part of the minerals and vitamins necessary for good nutrition, fill the gaps in the dietary and carry more than its proportionate third of the daily requirements.

Lunch Must Fill All Needs

It is not always enough that the lunch be a balanced meal in itself. If it can be made to carry substantial amounts of the special nutrients that are most likely to be lacking in an average diet, greater benefits will accrue to the health and well-being of the child. This is not easy; only too often funds for school lunches are limited. But much can be done. The answer lies in careful food selection with a view to maximum nutritive value at low cost. To accomplish this, familiarity with the fundamentals of nutrition is essential.

Scientific research has provided a vast fund of information as to what constitutes a complete diet. The proximate principles, protein, fat and carbohydrate, have been investigated and subdivided to distinguish certain essential constituents. We know the inorganic elements that are needed for body tissues and fluids. We have substantial information concerning the vitamins that aid physiologic function and help to maintain general health.

For example, the value of a certain protein cannot be measured solely in terms of its nitrogen content, which is the distinguishing ingredient of all protein and is built into body tissue. Now we know that certain proteins have a higher biologic value than others. Proteins are split in digestion into amino acids which the body, in turn, builds into tissue. A variety of these amino acids is required. A protein that is deficient in some of them is incapable of supporting growth or maintaining body weight. Many of the amino acids supplement each other or are synthesized in the body, but others must be supplied in the food and are indispensable to normal growth and maintenance.

Fat, likewise, cannot be evaluated simply in terms of its energy value. The need of the body is not for fat in general but for certain specific fatty acids. A natural fat contains an assortment of fatty acids, which are present in different fats in widely varying proportions. Recent investigation has shown that butter-fat, for instance, contains 19 separate fatty acid components. The energy values of natural fats are practically identical. If the sole purpose of fats were to supply energy, the problem would be simple. However, in the case of fats, as with protein, there is the matter of quality, as well as quantity.

The animal body is versatile and can convert carbohydrate into fat for the building of tissue. Rats have been shown to thrive on a fat-free diet provided that small amounts of one of the essential unsaturated acids are present in the diet.

So far, carbohydrates seem to be interchangeable in metabolism, no certain one being essential or of superior value to any other when compared on the basis of caloric values.

At least 12 different minerals have been shown to be significant in human nutrition. These are calcium, phosphorus, iron, copper, potassium, sodium, chlorine, iodine, magnesium, manganese, zinc and sulfur. Calcium and phosphorus are important for building the skeleton and teeth, of which they form the major part of the structure. Calcium has special functions in blood coagulation and control of muscular activity, such as regulation of heart rhythm. Iron is necessary to maintain the quality of blood. It is a component of hemoglobin, the coloring matter in blood. In order to utilize iron properly in hemoglobin formation, small amounts of copper must be present in the diet. Sodium salts occur abundantly in the blood and other body fluids.

Functions of Other Minerals

Potassium is present in cell protoplasm. Potassium and sodium, chiefly in the form of chlorides, are the electrolytes in intracellular and extracellular fluids, respectively, and are responsible for the maintenance of normal osmotic pressure. Chlorine also is necessary for the formation of hydrochloric acid in the gastric juice. Iodine is necessary for the manufacture of thyroxin by the thyroid gland.

The specific function of manganese in nutrition still remains obscure. However, sufficient experimentation has been conducted upon animals that have been artificially deprived of manganese to establish the need of this element in the diet. In somewhat the same category is magnesium, although a lack of magnesium has been shown clinically to produce

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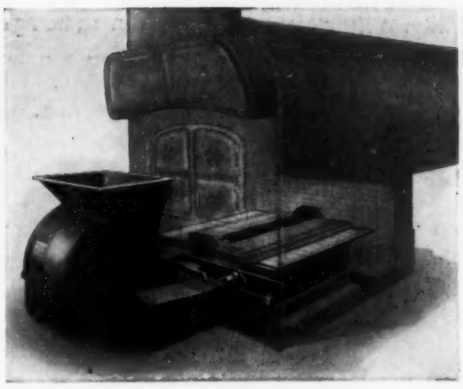

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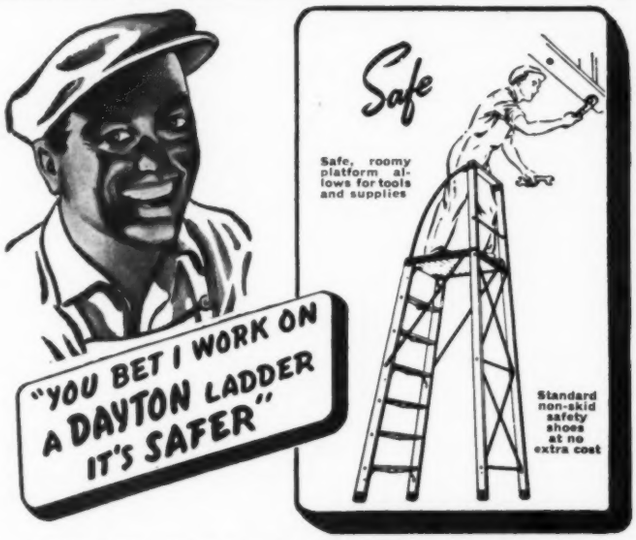
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nervous instability. Zinc is now known to be necessary in blood, catalyzing in some way the breakdown of carbon dioxide. Sulfur has long been known as an essential element. It is a part of the structure of the amino acids, cystine and methionine, and thus enters into protein metabolism in the building of soft tissue. Most of the mineral or inorganic elements have other important functions in the body.

Our knowledge of the vitamins, their chemical identity and functions, is changing rapidly. Reports from all parts of the world are gradually filling in the gaps in our knowledge of these factors.

There are at least seven vitamins that are now known to be significant in human nutrition. These are the vitamins A and D, vitamin C and certain factors of the vitamin B complex, *i.e.* thiamin (vitamin B_1), riboflavin (vitamin B_2 or G), nicotinic acid and vitamin B_6. One of the most interesting new vitamins is K. It nows appears that this vitamin is necessary to coagulate blood.

More Vitamins Await Discovery

No doubt there are other vitamins awaiting discovery. Their existence seems certain when we consider that no one has yet been able to prepare a diet from purified amounts of all known dietary essentials that can successfully support animal life. It has always been necessary to fall back upon a natural food, or the extract thereof, that supplies nutrient factors thus far outside the scope of our knowledge of nutrition.

The functions of all of the known vitamins have not been fully defined but considerable is known about A, B_1, nicotinic acid, C and D. Human requirements for these vitamins have been established only within fairly wide limits.

The exact function of vitamin A is not known but its importance has been established in such deficiency diseases as xeropthalmia, night blindness and lowered resistance to infection. It is a requisite of normal growth.

Thiamin, or vitamin B_1, is of fundamental importance in the prevention and cure of beriberi. It is useful in cases of anorexia resulting from improper diet and is necessary for optimal growth. Nicotinic acid has only one known specific function for human beings, *i. e.* the prevention and treatment of pellagra. Ascorbic acid, vitamin C, is specific for the prevention and correction of scurvy. Deficiency of ascorbic acid can produce or aggravate disorders of the teeth and gums and can be responsible for capillary fragility that gives rise to hemorrhagic conditions.

Vitamin D aids in the proper utilization by the body of calcium and phosphorus. Thus, it is specific in the prevention and treatment of rickets and other manifestations of faulty calcium and phosporus metabolism, such as tetany and osteomalacia. It is likewise necessary for building and maintaining teeth. The growing child requires vitamin D as does the infant, although probably in diminished amounts.

B_1 Found in Muscle Meats

Among the recent important contributions to our knowledge of vitamins is the discovery that some of our commonly eaten muscle meats contribute substantial amounts of vitamin B_1 to the diet. The importance of this source of B_1 had not been previously suspected. The exact function of this vitamin is to enable the body to burn pyruvic acid. Thus, it is concerned primarily with carbohydrate metabolism. Although long suspected, the significance of riboflavin in human nutrition has only recently been established.

How can this information be applied to the problems of daily feeding? Fortunately, leading authorities long ago gave us a list of certain protective foods that are peculiarly rich in the substances that are needed for growth and development and that stand guard over important life processes. An adequate diet contains liberal amounts of these protective foods and should supply the requisite amounts of all essential food factors.

There are possible exceptions to this rule. In some sections of the country, owing to variations in the composition of the earth's crust, there is a deficiency of iodine. This has been compensated by the use of iodized salt. Restrictions brought about by civilization make it difficult to obtain sufficient vitamin D from sunlight. The fortification of milk with vitamin D has helped to overcome this deficiency. Both of these measures have the endorsement of public health and medical authorities.

For various reasons, one of which is lack of knowledge, people do not choose adequate diets. In low income groups, limited budgets multiply these dietary deficiencies. The factors that are most often deficient are calcium, iron, vitamins A and B_1, nicotinic acid, C and D and sufficient high quality protein. The protective foods overcome these deficiencies.

Calcium is supplied by milk, which is the only dependable source of this element. Milk also supplies protein of high nutritive value and is a good source of vitamins A, nicotinic acid, riboflavin and vitamin D (if the milk is irradiated or otherwise fortified with this vitamin). Vegetables furnish vitamins A and B_1 and iron.

Citrus fruits are especially valuable for vitamin C; although they are also good sources of some minerals and other vitamins. Eggs supply iron and some vitamin D and are rich in vitamins A and riboflavin. Egg protein has a high nutritive value.

It is important in planning school lunches not to overlook inexpensive cuts of meat and, if possible, to provide a glandular meat, such as liver, at least once a week. Whole grain cereals are exceedingly valuable and can be used in a variety of ways. Combined with milk, they can be relied upon for body building and growth. The same applies to dried peas or beans. These are inexpensive and can be used with milk in the preparation of attractive nutritious main dishes.

Essential Nutrients in Milk

Probably the most important aid in the preparation of a sufficiently nutritious school lunch is an economical milk supply. Milk, more completely than any other single food, furnishes the essential nutrients that are most likely to be lacking in the diet. Particularly suitable for this purpose is irradiated evaporated milk, which is pure whole cow's milk that has been evaporated to double richness. Nothing is removed except about half the water content of the original milk. Therefore, it supplies all of the nourishment for which we depend upon milk and, in addition, its vitamin D content has been increased by irradiation with ultraviolet light. This simple process has increased the nutritive value of the milk but has not increased its cost.

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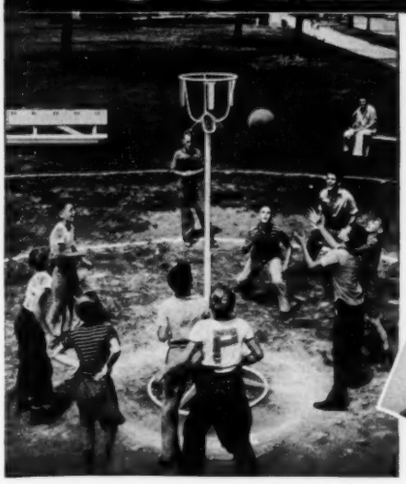

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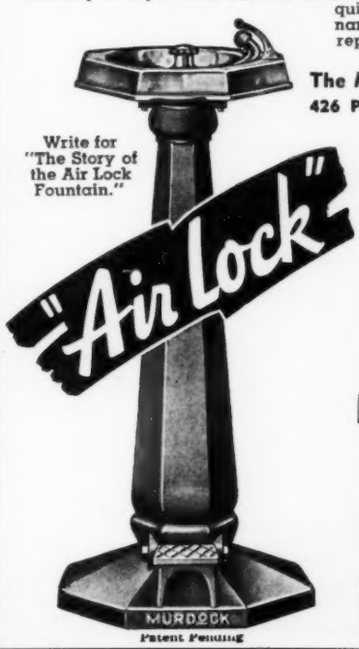
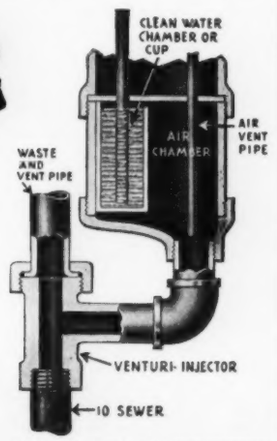


Patent Pending



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Chalk Dust

Frederick James Gaskell Toppin

ONE of the common criticisms hurled at present day education is that, although the little kiddies are taught tap dancing and bridge playing, their ability to read and spell has not been seriously expedited.

Whenever Joe Brown, who runs a pretty progressive school down near the big city, hears this accusation he gets mad. He knows from his tests and measurements that it is not true. He knows that his school, like most others, is doing a bang-up job in guiding children through such words as "antidisestablishmentarianism," or whatever the longest word is nowadays.

Joe stood this chatter about poor spelling as long as he could. Then he said to the local Kiwotary Club and Chamber of Commerce: "Bring on your best spellers and we will have an old-fashioned spelling bee. You fellows select your most erudite talent," says Joe, "and I'll match them against a similar number of my own run-of-the-mill eighth graders."

The date was set. But 'tis better to draw a curtain. The men-of-the-world started bravely, floundered and sank. The eighth grade stood firm. In five minutes it was over.

The populace felt that it had not received its money's worth, so the announcer tried again. No contest. A third time the spellers of yesteryear stood up and fell down while the eighth graders stood up and spelled. The final score was so bad it had to be suppressed.

"Why," said Granpa Jones, "the dadblamed little tykes went through the dictionary like it was a primer."

When Joe goes to Kiwotary meetings nowadays, he doesn't get mad any more.

• •

Dear Superintendent

DEAR SUPERINTENDENT: I am enclosing a bill for $10 damages to my son John's bicycle. When John came home today from your playground his rear mud guard was torn off and several of his spokes were bent. What you need is more discipline and less of this let's-all-be-on-our-honor-children stuff. If you are a reasonable man, which I and the public doubt, you will pay this bill. If not I shall take the matter up with the head man at Hartford.

July Jumble

Let others hail the month of sun,
To hills or seashore hie.
Alas! my work has just begun
With woe I greet July.

Reports pile all around me and questionnaires galore, while every mail brings in its trail a half a dozen more. My world is in confusion, disordered and grotesque. The litter from a thousand wars piles higher on my desk. A score of applications are waiting for review, jazzed up with fulsome references from friends I never knew; requests for information which I can't or won't supply and doodles for a manuscript—these things all spell July.

Let others blithely wander
And throw aside their cares,
While here sit I, and ponder
Among my questionnaires.

The halls are filled with parents who are bent on homicide while, witlessly, I paw into my desk and try to hide, for I must write the board report—though who will give it heed? In fact, I sometimes wonder if half my board can read. A hundred college entrance blanks are waiting to be scaled; a hundred cold-eyed college deans will swear they were not mailed. My files are scattered here and yon while blueprints fill the air and, leering from the corner, lies a bold faced questionnaire.

Let others sing the litany
Of sweet vacation joys,
To me the month of liberty
Is just a lot of noise.

What, sir, is your reaction to the latest styles in ink? Wire your best prepaid opinion on: "Do children ever think?" True or false: "The modern textbook leaves much to be desired." Please answer "yes" by airmail: "Are your married teachers fired?" The world of budding Ph.D's is leading me astray, their quiz programs are featuring a new brand of S. A. They hunt in vain for wisdom, which I know they'll never find, for I vaguely chew my pencil and absentee my mind.

Oh give me bleak December when the boilers will not boil or give me January with its tumult and its toil. I shall even welcome April when the budgets all run dry, but I'm darned if you can make me like vacation and July.

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News in Review

Schools Can Feed Workers

Workers in the defense industries in many cases are badly fed and in some localities have trouble finding places to eat, it was declared at the National Nutrition Conference for Defense, held in Washington, D. C., May 26 to 28.

To alleviate this situation, Dr. Mary deGarmo Bryan, editor of the school cafeteria department of The NATION'S SCHOOLS, suggested that school cafeterias, with their equipment, trained dietitians and corps of workers, might be used to serve breakfasts and dinners to workers in near-by factories. Large numbers of workers could thus be fed at a time when the school cafeterias are idle, Doctor Bryan stated.

Fundamental training in nutrition for teachers and school administrators as well as for nurses, social workers, public health dentists and doctors and all workers having contact with large groups of the population was recommended by the President's nutrition conference. Strong courses should be incorporated in the curriculums of all institutions training such workers.

For professional workers in the field of dietetics and for teachers of health education, social and biological sciences, home economics and agriculture, strong additional work in nutrition as a part of their specialized training was recommended.

Refresher courses for persons already in the field whose basic training antedates the newer knowledge of nutrition were urged.

The extension of the school lunch program to all school children, in addition to its other advantages, would have a sound psychological basis, Secretary of Labor Perkins told the conference. It would provide children whose parents have not taught them sound food habits with a nutritionally adequate noon meal.

TEACHERS

War on Union Front

The American Federation of Teachers took immediate steps to organize new unions in New York and Philadelphia to replace the three locals that were ousted in the national referendum of members of the federation held on June 6, according to Dr. George S. Counts, president.

The three organizations expelled in the referendum are the Teachers Union and College Teachers Union of New York and the Philadelphia Teachers Union, which were charged with being controlled by Communists.

After the referendum it was announced by the leaders of the ousted New York unions that the vote was illegal and that the case would probably be taken to court. Inasmuch as the New York organizations had already elected delegates to the annual convention of the federation, which will be held in Detroit beginning August 22, it is anticipated that there will be a bitter fight over the question of seating the delegates.

John D. Connors, national vice president of the American Federation of Teachers, is convinced that delegates from the ousted locals will not be permitted to attend the convention.

Leaders of the two New York locals, however, declare that their delegates will demand seats at the convention.

The campaign now under way is to organize New York City teachers into a "democratically controlled, bona fide teachers' union." The federation hopes to enroll 10,000 teachers in the new organization.

ADMINISTRATION

Parents' Interests Studied

A study recently made by the Research Committee of Seattle Principals' Association to measure the interests of parents in the schools revealed that most parents are interested in how their children are being taught, what they are being taught and what results are being achieved.

A questionnaire was sent to 2203 parents in six elementary school districts with the request that they rate 12 activities of the school system according to their interest. More than 50 per cent of the questionnaires were returned.

In addition to the interest rating, parents were asked to answer two questions: (1) What job do you think the school is doing especially well? (2) What suggestions do you have for improvement in our schools? Answers to these questions revealed general approval of the school system and indicated that most Seattle parents had an excellent understanding of what the schools are striving to accomplish.

46 States Provide Textbooks

Free textbooks are now provided in 46 states in addition to the District of Columbia, it was reported by the American Municipal Association. Commenting on the report the *Christian Science Monitor* states: "Only two states, South Carolina and Oklahoma, have no general provisions for free textbooks, although South Carolina has a state-wide rental system. Fourteen states have optional laws. The remainder have mandatory statutes."

Educators Mobilize for China

A National Educators' Committee for China has been formed by leading American college and university presidents to mobilize assistance in this country for the 770 Chinese schools and 120 colleges and universities whose students carried their books and instruments more than 1000 miles into the interior of the country to protect them from destruction by constant bombardment. A large portion of the $5,000,000 fund that is now being raised for China by the United China Relief organization will be allocated for the rehabilitation and maintenance of Chinese schools and colleges.

BUILDINGS

"Housekeeping" Improvements

A number of "housekeeping" changes that will improve school environment and thus help children to study more easily have been recommended by Homer W. Anderson, superintendent of instruction of St. Louis public schools. Some of the suggestions made by Supt. Anderson are:

Replace all single-hung window shades with double-hung shades to provide maximum light.

Refinish kindergarten floors with either linoleum or high-grade floor finishing materials. Extend this work to other classrooms and corridors as rapidly as possible.

Continue the interior painting program and, in the meantime, wash all dirty walls.

Provide bulletin boards for classrooms and offices.

Provide open bookcases and furniture for elementary classroom libraries.

Adapt tables and desks to the size of the children, providing desks and seats of two or three sizes, if necessary.

Replace obsolete classroom furniture as soon as possible.

Remodel home economics laboratories and shops more definitely to suit the needs of pupils in vocational and educational guidance and in the development of manual skills.

Extend playgrounds and indoor facilities for play and assembly activities.

Provide double-classroom study hall in high schools wherever possible and needed.

Provide adequate budget allowance for elementary school library books, for high school libraries and for maps, slides and film projectors.

SUMMER COURSES

Adult-Child Relationship Clinic

Southard School, Topeka, Kan., held its fourth annual institute on adult-child relationships, June 2 to 13. Forums, lectures and discussions were devoted to various behavior problems in children from infancy through adolescence.

The institute was opened with an introduction by Dr. Karl Menninger, who presented a brief history of psychiatry and discussed the relationship between psychiatry, education and the social sciences. The programs for each day were planned progressively so that the first hour of each session was devoted to discussions of normal developments in children; the second hour, to deviations from the norms; the third hour, to case presentations, and the fourth hour, to an open forum.

The institute was attended by school administrators and teachers and social workers.

Columbia's Course for Custodians

The third annual short course for school building service employes, supervisors, custodians, janitors and engineers was held at Teachers College, Columbia University, June 23 to 27. The intensive five day course consisted of lectures, demonstrations and round table discussions of problems relating to school building operation and maintenance. The instructional staff included Dr. H. H. Linn, superintendent of buildings and grounds, who was in charge of the course, K. P. Grabarkiewicz, assistant superintendent of operation, and L. C. Helm, superintendent of operation, Teachers College.

NATIONAL DEFENSE

Jobs for June Graduates

Colleges cannot fill 33 per cent of the jobs that are being offered to June graduates, it was recently revealed by E. E. Crabb, president of the Investors Syndicate.

"Although American institutions of higher learning are meeting two thirds of the demands on them for training workers, they are not satisfying requests from some industries and in some regions by any such proportions," Mr. Crabb stated.

According to the organization's annual national survey of college graduates' job prospects, defense and allied industries are making the greatest increase in the number of demands for workers and are showing the largest percentage of gains in job openings for June graduates. Shortages in some fields

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have been aggravated by the policies of the draft boards that call up technically skilled employes. However, some of the shortages have been alleviated by the enrollment in summer and night vocational courses of present students or graduates of a year or two ago, as well as the numbers of sophomores, juniors and even seniors who are leaving school to take advantage of the attractive pay being offered by defense and allied industries.

Home Nursing Training Urged

The schools can contribute to national preparedness in the field of home nursing, according to a pamphlet recently released by the U. S. Office of Education. The pamphlet is the first in a series to be printed under the title, "Education and National Defense."

Commenting on the problem, Commissioner John W. Studebaker declared: "Although 190,000 girls annually receive in public schools some training in home nursing as part of their preparation for intelligent homemaking, many more women with more intensive training of this character will be needed in the home lines of defense in times of emergency. . . . Preparation for this responsibility is becoming increasingly available in the public schools through courses in home nursing or home hygiene, sections of the home economics program, evening classes for adult home makers and Red Cross courses in the schools."

HEALTH

Sight Conservation Program

Two thirds of all eye impairments are preventable, it was declared by E. L. Griffith, director of visual education, Great Northern Life Insurance Company, in an address to the lighting sales section of the annual sales conference of Edison Electric Institute, held in Chicago recently. Describing the work his company is doing for eyesight protection, Mr. Griffith stated that medals, diplomas and cash awards will be offered to school children for the best answers to a questionnaire dealing with vision conservation. In order to answer the questions, children will have to apply for material to local offices of companies whose business is saving vision.

Noon Hour Progress

The consolidated school at Meriden, Iowa, has worked out for the pupils a lunch hour program, which is under the direction of the physical education coach.

The activities are organized on a seasonal and departmental basis. Some 75 to 100 games have been suggested in the coach's summer school study of the program. They are grouped into games and activities for the kindergarten and primary grades, the intermediate grades, the junior high school and the high school.

When intramural games are in progress in the gymnasium, there is practically no noise or confusion in the corridors, grade rooms, study hall or about the building. In some games both girls and boys participate.

The hot lunch also is an important part of the noon hour program. One hot dish is served at a nominal cost to pupils. The lunch period is staggered so that the younger children have eaten and are out of the way before the upper grades and high school pupils are dismissed from the morning session.

Coming Meetings

June 19-21—School Administrators' Conference, George Peabody College for Teachers, Nashville, Tenn.

June 20-21—Ohio Education Association, Cedar Point, Ohio.

June 22-July 13—California Adult Education Workshop, Mills College, Calif.

June 29-July 3—National Education Association, Boston.

July 8-12—Association for Childhood Education, Child Study Conference, Oakland, Calif.

Oct. 9-11—Utah Education Association, Salt Lake City.

Oct. 13-16—National Association of Public School Business Officials, Atlantic City, N. J.

Oct. 16-18—Wyoming Education Association, Cheyenne.

Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.

Oct. 22-25—New Mexico Educational Association, Albuquerque.

Oct. 23-24—Minnesota Education Association, Municipal Auditorium, St. Paul.

Oct. 23-24—New Hampshire State Teachers Association, Nashua.

Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.

Oct. 24-25—Maryland State Teachers Association, Baltimore.

Oct. 29-31—West Virginia State Education Association, Charleston.

Oct. 29-31—North Dakota Education Association, Minot.

Oct. 29-31—Maine Teachers Association, Bangor.

Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.

Nov. 6-8—Conference of Food Service Directors, New York City.

Nov. 6-8—Iowa State Teachers Association, Des Moines.

Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.

Nov. 7-9—New Jersey Education Association, Atlantic City.

Nov. 10-13—National Council on Schoolhouse Construction, Cavalier Hotel, Virginia Beach, Va.

Nov. 13-15—Arizona Education Association, Phoenix.

Nov. 18-21—Virginia Education Association, Richmond.

Nov. 20-22—Texas State Teachers Association, Houston.

Nov. 26-29—Missouri State Teachers Association, St. Louis.

Dec. 29-31—Pennsylvania State Education Association, Harrisburg.

Dec. 29-31—Illinois Education Association, Chicago.

Feb. 20-21—National Advisory Council on School Building Problems, St. Francis Hotel, San Francisco.

Feb. 21-26—American Association of School Administrators, San Francisco.

April 8-10—Inland Empire Education Association, Spokane, Wash.

INSTRUCTION

Religious Education

Objections to the proposal of Dr. William H. Johnson, superintendent of Chicago public schools, to provide for the religious education of pupils by allowing time and giving credit for such training were recently set forth in a letter from the Illinois Council of the Friends of the Public Schools to Doctor Johnson. The principal objections stated were as follows:

"1. It would introduce sectarianism in the schools and result in friction and intolerance.

"2. The cost, at present, would be borne by the various churches but how long would it be before certain groups would begin to bring political pressure to have the board of education make regular appropriations in their budget for this training?

"3. In giving credit for religious education you are making it a part of the curriculum, thereby establishing a coalition between church and state.

"4. The time of the regularly certificated public schools teacher would have to be used in keeping records for work done outside of the public school.

"5. Teachers, uncertificated and outside the public schools system, would be grading children and giving credits, which might mean their passing or not passing in their promotion from one grade to another.

"6. The fact that this offer comes at a time when our minds are so concerned with national problems leads one to fear the program will not be given due consideration by the parents who are or should be vitally concerned."

The council recommended that a course of ethics be instituted, beginning in the grade schools.

Junior Colleges to Be Studied

Special national committees have been appointed by James C. Miller of Columbia, Mo., president of the American Association of Junior Colleges, to study four curriculums in the 625 junior colleges in the United States.

The four fields that are to be studied by the committees during the coming year are aviation, health education, psychology and education for family life.

Programs, curriculums, equipment, staff and other factors related to the more effective preparation of junior college students in these fields will be investigated. Recommendations for improvements will be made at the next annual meeting of the association at Los Angeles in February 1942.

Special attention will also be given to better preparation of junior college instructors of terminal courses through an

additional committee that has been appointed to work with Dr. E. V. Hollis of the staff of the American Council on Education, who has been assigned to study the field of the preparation of teachers of two year courses.

Exchange Teaching Limited

In answer to numerous inquiries from secondary school teachers in both the United States and the Latin American republics, John W. Studebaker, U. S. commissioner of education, revealed that exchange of secondary school teachers between the United States and other American republics is quite limited.

"Consideration is now being given to the possibilities of a system of exchanges between teachers in the United States and other American republics," Commissioner Studebaker stated, "but until such time as a plan can be worked out and announced teachers both here and in Latin America should know that such opportunities are quite limited."

High I. Q. and Happiness

A study of 214 seventh grade pupils in five public schools in Oak Park, Ill., made by Susan Elliott, graduate student in psychology at the University of Chicago, revealed that grade school children with high I. Q.'s are "happier and more popular with their classmates than children of average intelligence."

This finding is contrary to the opinions of many clinicians and educators, Miss Elliott reported. The rating of the children in both social and personal adjustment was based upon ratings made by the teachers who were best acquainted with the pupils and upon ratings obtained from questionnaires submitted to the pupils themselves.

New Degrees in Education Offered

Thirty-seven applicants started work toward the new advanced professional degrees for school teachers and administrators that are being offered at the University of Illinois when the summer session opened June 16.

O. M. Chute, superintendent of grade schools at Litchfield, Ill., will be the only candidate immediately admitted to work for the new degree of doctor of education. However, several of the 36 candidates accepted for the new degree of master of education intend to continue for the doctorate degree. Candidates were chosen on the basis of professional success, scholarship and personality.

Recordings as Teaching Aids

Lectures on the "Use of Recordings in Daily Classroom Activities" were presented at the summer sessions of six Southern colleges by Paul Thornton, music specialist of the RCA Educational

NEW YORK WORLD-TELEGRAM, MONDAY, JUNE 2, 1941.

Ultra-Violet Rays Check Measles Epidemic in Schools

Scientists Suggest Use of Method to Fight Contagious Disease in Military Camps

By the United Press.

CLEVELAND, June 2.—Possibility of using ultra-violet rays to check spread of airborne contagious diseases was suggest...

Ultra-Violet Ray Tried in Schools

Use in Checking Contagious Diseases in Classrooms Is Hailed

CLEVELAND (U.P.)—The possibility of using ultra-violet rays to check the spread of contagious diseases in school rooms and other meeting places was suggested to physicians today as the American Medical Association opened its 92d convention.

William F. Wells and his wife Mildred, both of the University of Pennsylvania School of Medicine, showed how by using ultra-violet light to sterilize the air on class rooms they had reversed the usual trend of a measles epidemic in three schools.

They reported that during a recent epidemic only a third as many cases occurred in primary grades where ultra-violet irradiation was carried on as in secondary grades not subjected to the experiment.

Ordinarily, during epidemics, there are three times as many cases in the lower grades as in the upper, Wells said.

He suggested that the method might be valuable to military authorities in preventing the spread of disease where men are congregated.

Experiments in Schools

The experiments were conducted in the Germantown (Pa.) Friends School and two public schools in Swarthmore, Pa. Wells, a bacteriologist and his wife, a physician, used simple, indirect ultra-violet fixtures in the lower grades. They were hung low and operating continuously during school hours, sent out rays which killed bacteria borne on the natural air currents in the room.

The result "strongly indicated" Wells said, the feasibility of extending the plan to such public assembly places as theaters and churches.

"You can have contagion-proof rooms in the same sense that we now have fireproof buildings," he said, emphasizing that the method while not stopping the disease apparently greatly resists its spread.

Reprint from Newark Evening News, June 2, 1941

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Quartz Ultraviolet Lamps—for air sanitation. Especially designed for application in schools. We will be glad to furnish specifications and layouts for your particular requirements. Inquiries will receive prompt attention.

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Department. Mr. Thornton pointed out that the use of recordings in the classroom contributes to the pupils' knowledge and at the same time increases the pleasure in learning.

MEETINGS

Safety Education Group Meets

The first annual founders' day dinner of the National Safety Education Association was held Friday, June 13, at the Hotel Holley in New York. Fifteen pioneers of the safety education movement were honored at the dinner. New officers who were installed at the meeting were: Irma Gene Nevins, director, safety division, Kansas State Teachers College, Pittsburg, Kan.; Dr. Nathaniel O. Schneider, supervising critic, physical and industrial education, Iowa State Teachers College, Cedar Falls, and Elmer B. Siebrecht, assistant teaching fellow, Center for Safety Education, New York University.

Education Fellowship Conference

Plans have been completed for the program of the New Education Fellowship Conference to be held in Ann Arbor, Mich., July 6 to 12. The meeting will be the first to be held in the Western Hemisphere since the organization's inception in 1915.

The general conference schedule as outlined includes general sessions every morning, except Tuesday, from 11 to 12:30; study groups; lectures and seminars; international teas; folk festivals, and informal conferences. An international children's art exhibit, an Indian exhibit and a book exhibit are also planned.

Among the speakers who are scheduled to appear on the program are: Thomas Mann, Princeton University; the Honorable Hu Shih, Chinese ambassador to the United States; Luis Sanchez Ponton, minister of education of Mexico, and Frederick Clarke, Institute of Education, London University.

PUBLICATIONS

New York Makes Progress

The progress that has been made in New York City schools during the last twenty years is stressed in "All the Children," the 1940 report of Dr. Harold G. Campbell, New York City superintendent of schools. A special chapter in the report, "Teaching Now and Twenty Years Ago," was written by four teachers who compare the problems that the schools face today with those of twenty years ago.

Addition to Democracy Series

The Educational Policies Commission has announced the publication of the fifth volume in its series on education in American democracy entitled "The Education of Free Men in American Democracy." The book includes chapters on "The Quality of Democratic Education," "The Knowledge Necessary for Free Men" and "Government, the Teacher and the People." Copies may be obtained from the Educational Policies Commission, 1201 Sixteenth Street, N. W., Washington, D. C.

RADIO

Communications Club Established

Because of its background of radio activity in the high schools, Peekskill, N. Y., has an unusual number of licensed amateur operators, it has been discovered by the National Youth Administration. As a result of this interest in radio, the N.Y.A. has established one of its new communications clubs there. The club's station, W2NIK, is being equipped by the government in quarters provided by the school. The club now enrolls 30 members who meet every week for instruction in theory and code.

Teaching Radio by Radio

Marshall H. Ensor, a high school teacher of Olathe, Kan., was presented with the William S. Paley amateur radio award for 1940 at a luncheon given in his honor on June 2. Mr. Ensor was selected to receive the award in recognition of his services in training thousands of amateurs by the voluntary broadcasting of regular lessons in radio code and fundamentals from his own transmitter, W9BSP, over a ten year period.

VISUAL EDUCATION

Films Teach Safety

Film strips on bicycle safety, fire prevention, playground safety, school safety patrols and home safety have been made available to teachers by the National Safety Council. The 35 mm. silent strips have titles superimposed on the film so that each strip is a complete unit in itself. They can be used as special teaching aids to bring safety messages to the classroom.

Color Slides Available

The first teaching series of kodachrome lantern slides to be offered by any institution has recently been made available to schools and colleges by the department of education of the American Museum of Natural History. The set of 25 slides is entitled "The Evolution of the Horse." A special manuscript has been written to accompany the slides.

Films in Review

AN AIRPLANE TRIP. 16 *mm., sound.* 400 *feet.* 1 *reel.* 12 *minutes. Erpi Classroom Films, Inc.,* 35-11 *Thirty-Fifth Avenue, Long Island City, N. Y. Subject: transportation unit, geography, motivation for story writing. Grades* 1 *to* 6. *Rating A.*

Dorothy and her mother arrive at the airport in San Francisco and buy their tickets while the attendant takes care of their baggage. In the meantime we are shown the interior of the mechanical part of the plane, the location of the gasoline tank and the checking of the motor before each trip.

The stairs are rolled up, the pilot and stewardess go aboard first, the passengers follow. Now we see the interior of the plane and watch the stewardess perform her duties. She serves lunch to Dorothy. From time to time we are shown the views that Dorothy sees as she looks out of the airplane windows. When night comes the stewardess makes up the beds. Later, in the night, we land at the Salt Lake City airport.

This picture was well planned. The sound utility is high because it transmits the hum that is heard in a plane when it is flying. The views that Dorothy sees through the airplane windows would give pupils an excellent idea of the topography of the western United States. The vocabulary is good and should promote an understanding of the terminology because a picture of the part of the plane that is under discussion is shown at the time the word is being spoken.

This picture could be used in a transportation unit in any grade from 1 to 6. It would be more valuable in grades 3 to 6 because these children are endeavoring to understand land surfaces and this film would heighten that understanding.—*Reviewed by* RALPH U. SWISHER.

BODY FRAMEWORK. 16 *mm., silent.* 400 *feet.* 1 *reel.* 11 *minutes. Eastman Teaching Films, Inc. Subject: physiology or biology. Grades: junior or senior high school. Rating B.*

As the picture opens skeletons of a giraffe, a rhinoceros, a jelly fish, an elephant, a white mouse, a horse, a dog, a monkey, a gorilla and, finally, of a man are shown. Cross-section views are presented of the periosteum, the hard dense bone, spongy bone and bone marrow. Chemical experiments are per-

formed to show bone ash and also the dissolving of the mineral material of the bone by acid, which leaves a flexible residue. A bone that has been dried out is depicted and its brittle nature is demonstrated.

The skeletal framework of the arm is shown as it changes during growth. A fracture and the setting of the bone with the mended section are portrayed. The action of the various kinds of joints is clearly illustrated. The film closes with views showing the condition of the bones in one who has rickets and the effect of sunshine and cod liver oil on growth of bone structure.

This picture is not quite as effective as it should be. There are places in which the photography is not clear and more captions would facilitate understanding of the various processes.—*Reviewed by* WILLIAM O. MAYROSE.

Film Releases

Freighter Trip to the Caribbean—Life aboard a freighter in southern waters, showing scenes of native industrial life in the West Indies. Included is the story of sisal from the plantation stage up to its final processing into rope. 16 mm., silent, color. 2 reels. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

Sky Defenders—An aviation authority describes and pictures the training of Army air cadets. The film was made in cooperation with the United States Air Corps and shows spectacular flying scenes, including a simulated bombing flight in close formation by modern fighting planes. 16 mm., sound. (Black and white and color.) Forty-five minutes. Bell and Howell, 1801 Larchmont Avenue, Chicago.

Make the Most of Playtime!—The film shows the rapid development of community athletics in America and dramatizes the past progress and future potentialities of organized sport. One of the major objectives is the promotion of better playing facilities for underprivileged children. 16 mm., sound, color. Athletic Institute, Inc., 209 South State Street, Chicago.

City Water Supply—Animated drawings are used to describe the relation between rainfall and life; sources of city water supplies, such as wells, rivers, lakes and watersheds; water-borne diseases, and methods of water distribution. The necessity for safeguarding the water supply is stressed. 16 mm., sound. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

The Passenger Train—An instructional sound film that interprets a journey on a modern, streamlined, diesel electric powered passenger train. The duties of the personnel are depicted; tunnels and bridges are portrayed. Produced in collaboration with Dr. Arthur I. Gates, Teachers College, Columbia University, and Celeste C. Peardon. 16 mm., sound. Erpi Classroom Films Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

A Citizen and His Government—An American mechanic introduces a foreign relative to some common sights and institutions of a city and explains how the government protects the health, life and property of the public, administers education and provides playgrounds. 16 mm., silent. 2 reels. Visual Education Service, 131 Clarendon Street, Boston.

An Apple a Day—A study in color of large scale apple growing, showing the pruning, spraying and grafting of the trees and, finally, the packing and all other operations necessary to prepare the fruit for delivery. 16 mm., silent. 1 reel. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

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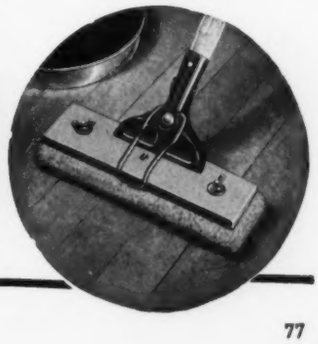

NAMES IN NEWS

Superintendents

FRANK CODY, superintendent of schools of Detroit, has submitted his resignation to take effect on June 30. Mr. Cody was made assistant superintendent of Detroit schools in 1914 and became superintendent in 1919. He celebrated his seventieth birthday last December. Mr. Cody was president of the Michigan Education Association in 1927 and of the department of superintendence of the National Education Association in 1929-30. He is a member of the editorial board of The NATION'S SCHOOLS.

CHARLES B. COSMAN has accepted the position of supervising principal of Martin Van Buren High School, Kinderhook, N. Y. For the last five years he has been principal of Split Rock High School near Syracuse, N. Y.

ARNOLD D. NORTHRUP, principal of Hammond High School, Hammond, N. Y., has been named superintendent of the third St. Lawrence School supervisory district at Heuvelton, N. Y., succeeding CARLOS S. BLOOD.

W. FRANK WARREN, for the last eight years superintendent of schools of Durham, N. C., has been reelected for another two year term.

P. B. MATTHEWS, district superintendent of schools of the first supervisory district of Suffolk County, New York, will retire on August 1 after twenty-five years of service. He will be succeeded by HARRY B. WARD.

EUGENE YOUNGERT, assistant professor of education, University of Vermont, has accepted the position of principal of Oak Park and River Forest Townships High School, Oak Park, Ill.

DR. E. R. VAN KLEECK, superintendent of schools, Grosse Pointe, Mich., has been named assistant commissioner of education for New York State.

RALPH E. DUGDALE, superintendent of schools of Portland, Ore., has been reelected for a five year period.

KENNETH E. OBERHOLTZER has been reelected for four years as superintendent of schools of Long Beach, Calif.

H. E. HOLLISTER has been appointed district superintendent of the second district of Westchester County, New York.

EDMUND R. SAWYER has been appointed superintendent of schools in the Massachusetts Union comprising the towns of East Longmeadow, Hampden and Wilbraham. He succeeds BURR F. JONES, who becomes superintendent of schools at Plymouth, Mass.

WELLINGTON C. MEPHAM, district superintendent of the second supervisory district, Nassau County, New York, retired at the close of the school year. H. W. GROSS has been appointed to succeed Mr. Mepham.

N. BERTON ALTER, district superintendent of schools of the first supervisory district of Montgomery County, New York, retired at the close of the school year.

ALBERT J. FIELDS, district superintendent, seventh supervisory district, St. Lawrence County, New York, retired in June. He will be succeeded by ADELBERT A. KINGSTON.

JOHN RAUH was elected superintendent of schools of Brookfield, Mo., at a recent meeting of the board of education. Mr. Rauh, who was formerly principal of Brookfield Junior High School, succeeds L. V. CROOKSHANK.

JOHN A. DECAMP, superintendent of schools at Utica, N. Y., retired in June after forty-nine years in the teaching profession.

Principals

DR. HAROLD SPEARS, for the last seven years director of research and secondary education in the public schools of Evansville, Ind., will become principal of Highland Park High School, Highland Park, Ill., when the new school year begins.

JAMES F. DAVIS, principal of Richville High School, Salamanca, N. Y., will become supervising principal of Ellicottville School, Ellicottville, N. Y., next term.

GEORGE BUCK, principal of Shortridge High School, Indianapolis, since 1910, will retire on June 30.

FRED J. MILLER, for twenty-eight years principal of East High School, Waterloo, Iowa, retired on June 6.

ROBERT L. D. DAVIDSON, assistant principal of Clayton High School, Clayton, N. J., has been made head of Lambertville High School, Lambertville, N. J., to fill the vacancy caused by the death of BEATRICE M. PETRIE.

RUSSELL E. BRIDGES, for twelve years assistant principal and athletics director at Highlands High School, Fort Thomas, Ky., has been named principal to succeed JOE W. AUSTIN.

B. A. BUCHANAN, principal of Piedmont High School, Piedmont, Ala., for eight years, has resigned to accept the principalship of Handley High School, Roanoke, Ala.

DR. HARRY E. WINNER, principal of South Hills High School, Duquesne, Pa., resigned recently. Doctor Winner opened the school as its first principal on April 9, 1917. He had previously been principal of the Duquesne High School and the sixteenth ward schools.

RAY KRAKOWER, principal of P.S. 54, Bronx, N. Y., has been nominated by the board of superintendents for the principalship of Wilton Junior High School.

HOLLIS A. LACHAT, member of the faculty of Doylestown High School, Doylestown, Pa., has been elected principal of the school to succeed M. ELIZABETH LAMB, who has resigned.

HENRY B. COOPER, head of the history department at Pitman High School, Pitman, N. J., for the last twelve years, was recently elected principal. Mr. Cooper suceeds L. ARTHUR WALTON, who has been named supervising principal of the Pitman school system.

Private Schools

MRS. MARIE L. LONGSHORE has been appointed head of Kensington High School for Girls, Philadelphia. She will replace DR. HARRIET J. LINK, who resigned recently because of ill health.

GEORGE M. KENDALL has been named principal of Kendall Hall, Peterboro, N. H., following the resignation of CHARLES P. KENDALL, who founded the school in 1915.

In the Colleges

FRANK HUGHES SPARKS, former automobile accessories manufacturer, has been elected president of Wabash College, Crawfordsville, Ind. For the last four years Doctor Sparks has been teaching in the economics department of the University of Southern California.

E. WILSON LYON, professor of history at Colgate University, has been named successor to CHARLES K. EDMUNDS, president of Pomona College, Claremont, Calif. Doctor Edmunds has retired after thirteen years as president of the school.

MILLARD H. JENCKS has been elected president of St. Lawrence University, Canton, N. Y., for a term of five years.

DR. M. E. SADLER, pastor of the Central Christian Church of Austin, Tex., has been named president of Texas Christian University to succeed DR. E. M. WAITS. Doctor Sadler will assume his new duties on September 1.

DR. LESTER A. KIRKENDALL, associate professor of education, Teachers College of Connecticut, will become head of the educational guidance division of the University of Oklahoma.

Deaths

BERNARD M. LEACH, principal of Shenandoah High School, Shenandoah, Pa., died recently following a heart attack.

WILLIAM LAMBERT POTTS, principal of Longfellow Junior High School, Fresno, Calif., died recently of heart disease.

THOMAS CARMICHAEL, principal of Roberts High School, Roberts, Ill., for eleven years, died of a heart ailment.

DR. EVERETT DEAN MARTIN died recently following a heart attack. At the time of his death he held the post of professor of social philosophy at Claremont College, Claremont, Calif.

The Bookshelf

General

College Plans for Retirement Income. *By Rainard B. Robbins. New York: Columbia University Press,* 1940. *Pp.* ix+253. $2.75.

Hollis Dann. *By Reven S. DeJarnette. Boston: C. C. Birchard Company,* 1940. *Pp.* xii+157. $2.

Planning the Community School. *By N. L. Engelhardt and N. L. Engelhardt Jr. New York: American Book Company,* 1940. *Pp.* xix+188. $2.50.

A Boy Grows Up. *By Harry C. McKown and Marion LeBron. New York: McGraw-Hill Book Company, Inc.,* 1940. *Pp.* xv+299. $1.56 *to Schools and Colleges.*

Audio-Visual Aids to Instruction. *By Harry C. McKown and Alvin B. Roberts. New York: McGraw-Hill Book Company, Inc.,* 1940. *Pp.* xiv+385. $3.

American Junior Colleges. *Edited by Walter Crosby Eells. Washington, D. C.: American Council on Education,* 1940. *Pp.* x+585. $3.

Visual and Teaching Aids on Spain, Spain in the United States and Latin America. *Compiled by Lili Heimers. Montclair, N. J.: New Jersey State Teachers College,* 1940. *Pp.* 29. $0.50 *(Paper Cover, Mimeographed).*

Mental Health in the Classroom. *Thirteenth Yearbook of the Department of Supervisors and Directors of Instruction. Washington, D. C.: National Education Association,* 1940. *Pp.* viii+304. $2.

American Schools in Transition. *A Study of Pennsylvania. By Paul R. Mort and Francis G. Cornell. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. *Pp.* xxviii+546. $4.25.

Public Health and Hygiene. *A Students' Manual. By Charles F. Bolduan and Nils W. Bolduan. Philadelphia: W. B. Saunders Company,* 1941. *Pp.* x+366. *Third Edition.* $3.

The Meaning of Democracy. *By William F. Russell and Thomas H. Briggs. New York: The Macmillan Company,* 1941. *Pp.* xiii+413. $1.48 *(Subject to School Discount).*

The Road to Pan-Americanism. *By Dr. Joseph Tenenbaum. New York: Committee for Inter-American Cooperation,* 1941. *Pp.* 59. $0.50 *(Paper Cover).*

Textual

New Health and Growth Series: *Book 1, All Through the Day. Pp.* 178. $0.64. *Book 2, Through the Year. Pp.* 180. $0.72. *Book 3, Health Secrets. Pp.* 242. $0.76. *Book 4, Healthful Ways. Pp.* 246. $0.76. *Book 5, Let's Be Healthy. Pp.* 278. $0.80. *Book 6, Habits, Healthful and Safe. Pp.* 277. $0.84. *Book 7, Growing Up Healthily. Pp.* 277. $0.84. *Book 8, A Sound Body. Pp.* 310. $0.88. *By W. W. Charters, Dean F. Smiley and Ruth M. Strang. New York: The Macmillan Company,* 1941.

Everyday Economics. *By Cornelius C. Janzen and Orlando W. Stephenson. New York: Silver Burdett Company,* 1941. *Pp.* x+519. $1.88.

Their Merry-Go-Round. *By I. L. Kuykendall and M. V. Kuykendall Harding. (Designed for Kindergarten.) New York: The Macmillan Company,* 1940. $0.28 *(Paper Cover).*

Latin for Americans. *By B. L. Ullman and Norman E. Henry. New York: The Macmillan Company,* 1941. *Pp.* xiii+421. $1.68.

A High School Reading Program. *Issued by State Department of Education, Baltimore,* 1941. *Pp.* 127. $0.35.

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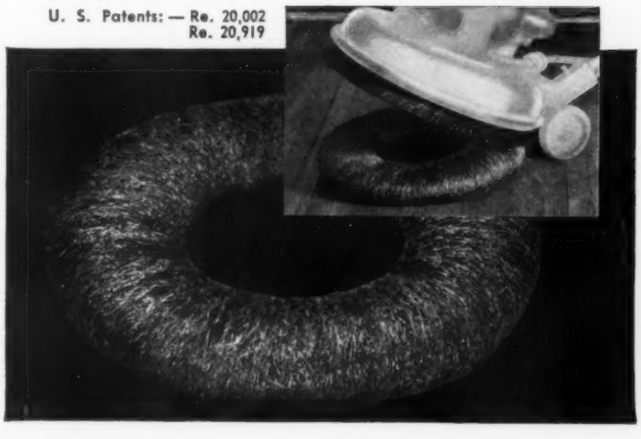

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School Executives and Architects are invited to visit the offices of The NATION'S SCHOOLS in Room 1221 of the Architects Building. A special conference room has been arranged for any convenience they might wish. The many exhibits and features of the building will be introduced to them if desired.

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WHAT'S NEW

New Glass Chalkboard

Two glass chalkboards have become one. It has been announced that New York Silicate Company's "Ezy-Rase" glass chalkboard and Pittsburgh Plate Glass Company's "Nucite" will hereafter be marketed under the name "Ezy-Rase Nucite." "Ezy-Rase Nucite" is now available in a two sided board that can be used with either chalk or wax crayon. The crayon board is a new development especially adapted for use in art rooms. It can be cleaned with a damp cloth.—New York Silicate Book Slate Co., Inc., 421 7th Ave., New York, N. Y.

• *When inquiring, refer to* **NS100**

Opaque Shades

Something new in lightproof shades, according to the manufacturer, is Triplex quality "Tontine." The shades are constructed of pyroxylin impregnated washable cloth that has the advantage of blocking out light and eliminating shadows. They are available in several cheerful colors and are resistant to cracking, fading and pinholing. The manufacturer will arrange to have a sample shade hung for inspection without cost. —E. I. Du Pont de Nemours & Company, Inc., Dept. HB, Newburgh, N. Y.

• *When inquiring, refer to* **NS101**

Hotpoint's "New Champ"

All of the service units that are best suited to use in school homemaking departments are combined in Edison General Electric's new custom-top range, the manufacturer asserts. An outstanding feature of the range is the "ad-a-foot" surface construction that permits the addition of standing sections to increase the surface capacity at minimum cost. Standard parts are interchangeable. —Edison General Electric Appliance Company, Inc., 5600 W. Taylor St., Chicago, Ill.

• *When inquiring, refer to* **NS102**

Heavy Duty Floor Machine

Custodians who are faced with a problem in floor cleaning will find a solution in the versatile Model K floor machine

that combines the operations of wire brush cleaning, steel wool burnishing and sanding in one unit. The slip hazard is eliminated, too, since no water or chemical is used. Wax, metal, grease, glue and other stubborn varieties of dirt and grime yield to the ministrations of the powerful wire brush. Steel wooling equipment for dry cleaning and a 16 inch sanding drum and sandpaper are the accessories that are included with the machine.—G. H. Tennant Company, 2530 N. 2nd St., Minneapolis, Minn.

• *When inquiring, refer to* **NS103**

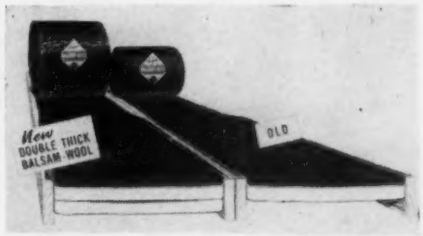
Tile Is Factory-Waxed

Hereafter, Johns-Manville asphalt tile will be prewaxed at the factory at no extra cost, the manufacturer has announced. The prewaxing of the tile is said to make it easy to handle and saves a considerable amount of money by eliminating the necessity for cleaning the material after installation. It is available in all of the styles and colors of the J-M line.—Johns-Manville, 22 E. 40th St., New York, N. Y.

• *When inquiring, refer to* **NS104**

More Insulation, Same Cost

New principles of heat and moisture control are combined in the new balsam-wool of greater thickness that is being marketed by Wood Conversion Com-



pany. The new product is available in two thicknesses: "double thick," which has three individual moisture barriers, and the "standard" blanket with two barriers. Each barrier is designed specifically to protect the individual thickness that each supports.—Wood Conversion Company, St. Paul, Minn.

• *When inquiring, refer to* **NS105**

Fluorescent Lighting Unit

The Beacon fluorescent unit contains four 40 watt lamps shielded by means of diffusing glass. The bottom of the reflector is open. Four lamps are mounted on a curved metal reflector that houses the necessary equipment to

operate the fluorescent lamps with a minimum of stroboscopic effect. All metal parts, including the hanger, are finished in satin nickel. Ornaments on the end caps are illuminated through sheets of translucent plastic. The design of the diffusing reflector has been carried out in such a way as to facilitate replacing the lamps with the least possible difficulty.—F. W. Wakefield Brass Company, Vermilion, Ohio.

• *When inquiring, refer to* **NS106**

Address manufacturers for further information and prices—or use Readers' Service blank on page 85.

All-Surface Paint

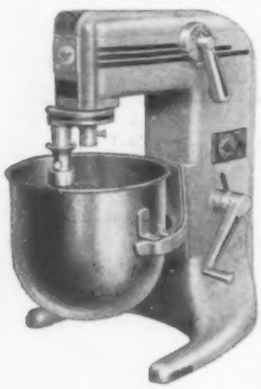
One coat does the entire job," is what the manufacturer says about Unitex, a flat oil paint that can be applied directly to any porous surface, such as wallboard, calcimine, bare plaster, wall paper, brick or casein. It penetrates into the most absorbent surface just enough to secure a tight bond, leaving a film of paint on the surface. It seals, primes and finishes in one coat. Uni-tex can be washed and refinished like any other oil paint and dries without brush or lap marks.—Elliott Paint & Varnish Co., 4525 W. 5th Ave., Chicago, Ill.

• *When inquiring, refer to* **NS107**

Solves Mixing Problems

A "good mixer" wherever it is—in the kitchen or in the laboratory—is the Reco model 422, which features a patented spiral whip with "folding-in" action. It can be used by cooks, bakers or anyone who has a mixing job.

The improved machine is equipped with a four speed transmission that permits shifting from one speed to another without stopping the motor. The automatic timer starts and stops the machine automatically. The mixer is made in 22 quart capacity and can be equipped with an adapter bowl for 12 quart capacity.—Reynolds Electric Company, 2650 W. Congress St., Chicago, Ill.



• *When inquiring, refer to* **NS108**

"Dryette" Absorbs Moisture

Humidity is the culprit that causes damage from mold and mildew and warping in basement areas, lockers, workshops, storerooms and darkrooms. As an easy, inexpensive way of overcoming this difficulty, Solvay Sales Corporation presents the Solvay Air-Dryette, Jr., a small, compact unit especially designed to reduce excess moisture in the air to a point at which condensation is eliminated.

The unit is equipped with a one piece triple V-shaped basket, which is filled with Solvay calcium chloride. The basket is suspended over an enameled pan that catches the moisture absorbed.—Solvay Sales Corporation, 40 Rector St., New York, N. Y.

• *When inquiring, refer to* **NS109**

Sprinkler System

Thoroughness, safety, economy are the three outstanding assets offered by "Travelrain" power sprinklers for watering large lawn areas, such as school grounds and athletic fields. The machine can be set by the gardener just before he leaves the school and the grounds will be watered during the evening or night. It operates unattended for from six to eight hours. An automatic shut-off stops the flow of water.

The sprinkler unit is attached to a central hydrant by means of a hose and can easily be moved from one end of the field to the other.—Travelrain Power Sprinkler Co., 362 North Canon Dr., Beverly Hills, Calif.

• *When inquiring, refer to* **NS110**

Metering Basin Faucet

Water can't be wasted with the Speakman self-closing metering basin faucet. When pressure is applied to the push button water flows instantly and shuts off automatically. The volume of water desired is predetermined by an external adjustment that is made after the installation of the unit. The faucet is machined to ensure trouble-free operation and is nonhammering, nondripping and nonclogging. The entire mechanism is self-contained in a single unit.—Speakman Company, Wilmington, Del.

• *When inquiring, refer to* **NS111**

Especially for "Point-Busters"

Only the most grimly determined pencil breaker can snap the point of the Templar Durolead pencil, the manufacturer claims. Furthermore, he must be able to exert a pressure of 10 pounds before the lead will give away. The point is reenforced with a patented lead and a special process that fuses the wood and lead and is designed to withstand pressure of more than 250 times its own weight. Free testing samples may be obtained from the manufacturer.—Reliance Pencil Corporation, Mount Vernon, N. Y.

• *When inquiring, refer to* **NS112**

Duplication Made Easy

"Hectograph hands" and carbons that refuse to align with the master copy are two sources of sorrow that typists will not have to contend with when they use the new Ditto Masterset. The carbon and master sheet are hinged together at the top so that they align automatically. The carbonized sheet is folded inside to obviate the necessity for handling it.

The Masterset can be used to provide masters for either gelatin or liquid duplicators. Typing through the master paper side provides a liquid type of master, while typing through the back of the carbon sheet provides a gelatin master.—Ditto, Incorporated, Harrison at Oakley, Chicago, Ill.

• *When inquiring, refer to* **NS113**

Plastic Luminaire

A new semi-indirect luminaire suitable for general illumination has recently been announced. The one piece stem is seamless brass tubing. All metal parts of the porcelain socket are nickel-plated except the polarized brass terminal. The basin is a translucent, colorless, ureaformaldehyde molded plastic that has been colored a soft shade of ivory. The unit is available

in 300 and 500 watt sizes only.—Westinghouse Electric and Manufacturing Company, Dept. 7-N-20, East Pittsburgh, Pa.

• *When inquiring, refer to* **NS114**

Quick, Quiet Cleaner

A vacuum cleaner that can be seen but not heard—even in the next room—is the most recent addition to the line of the Electric Vacuum Cleaner Company. The Premier Speedee cleaner is compact and lightweight, mounted on ball-bearing swivel casters. Dust, dirt and litter are drawn directly into the metal dirt container. The unit is 24 inches high and 13 inches in diameter. Tools for all general cleaning are furnished with the Speedee and tools for special cleaning jobs are also available.—Electric Vacuum Cleaner Co., Inc., 1734 Ivanhoe Rd., Cleveland, Ohio.

• *When inquiring, refer to* **NS115**

Photo-Electric Relay

Lights go on when they are needed and off when they are not needed, in accordance with the rise and fall of natural illumination, when they are controlled by the "Sun-Switch" photo-electric relay. The calibrated dials of the "Sun-Switch" can be adjusted to the two lighting levels at which the load is to be switched off and on. Operation is entirely automatic. The control circuit uses one type 921 photo-tube with a life expectancy of 20,000 hours and two type 6J5 tubes with life expectancies of 5000 hours. Operation is from 110 volts, 50 or 60 cycles, A.C.—United Cinephone Corporation, Torrington, Conn.

• *When inquiring, refer to* **NS116**

Five Sound Projectors

A sound kodascope to fit any requirement can be obtained from Eastman Kodak Company, which has announced five new sound projectors that cover the widest possible range of needs. A choice of six lenses is available for each projector, in focal lengths of from 1 to 4 inches, to fit all commonly used projection distances and screen sizes. Available power output of the various models ranges from 10 to 40 watts. All models accommodate 1600 foot reels for an uninterrupted 44 minute show at 24 frame sound speed. All models are portable.—Eastman Kodak Company, Rochester, N. Y.

• *When inquiring, refer to* **NS117**

Recessed Electric Driers

Schoolmen are going to approve highly an electric hand and face drier that is fully recessed into the wall. This is the case with Sani-Dri's new model, "FR-W." No more wall obstructions that may interfere with the floor cleaning ap-

paratus! No longer any danger of tripping over the pedal! A 30 ampere foot pedal control switch operates in a heavy cast iron box mounted on the wall.—Chicago Hardware Foundry Company, North Chicago, Ill.

• *When inquiring, refer to* **NS118**

Sound Distribution System

Holtzer-Cabot's sound distribution system, model 200, is designed primarily to meet conditions in schools that are already built. The cabinet requires only

a small amount of floor space and is finished in American walnut. The system has a capacity of 40 classroom loudspeakers and auditorium speakers. Individual switches are provided to make it possible to select any combination of rooms. The central panel contains all of the necessary switches and controls for the selection and regulation of programs.—Holtzer-Cabot Electric Co., 125 Amory St., Boston, Mass.

• *When inquiring, refer to* **NS119**

Stadium Seating

Grandstands and bleachers are not noted for their comfort; hence, the Williams stadium seat, which combines solid comfort with portability, should be good news to the school field. The seats are constructed on a ⅜ inch steel frame with a canvas back and an artificial leather seat that is heavily padded with cotton. They can be fastened onto the bleachers and may be rented to patrons as they enter the stadium or gymnasium.—A. P. Williams Iron & Bronze Co., Inc., 430-438 E. 102nd St., New York, N. Y.

• *When inquiring, refer to* **NS120**

Flexible Shaft Workshop

A complete portable workshop is now being offered by Foredom Electric Company, which has added to its regular line of flexible shaft tools several models that come complete with sets of the most frequently used accessories for carving,

grinding, milling, sanding and sawing. One of the outstanding features of the tools is the pencil sized handpiece that permits of delicate, easy control.—Foredom Electric Co., 27 Park Place, New York, N. Y.

• *When inquiring, refer to* **NS121**

New Model by DeVry

Novel and useful are the steel, rubber tipped legs on the carrying case of this new, low-priced model QR-12 16 mm. sound film projector which enable it to be used as a projector stand. The unit projects both sound and silent films and includes a clutch for showing single film frames as still pictures, a reverse for reviewing important scenes, nondetachable reel arms and film guard guides.—DeVry Corporation, 1111 Armitage Ave., Chicago, Ill.

• *When inquiring, refer to* **NS122**

NEW LITERATURE

Bigger, Better Buyer's Guide

School buyers looking for products of Beckley-Cardy Company, 1632 Indiana Ave., Chicago, Ill., will find everything from desks to workbooks listed in the new 192 page buyer's guide which is to be released in July. The volume will combine the company's school equipment and supply catalog with its books and teaching materials catalog. Requests for copies will be filled as soon as the guide is off the press.

• *When inquiring, refer to* **NS123**

Dish and Glasswashers Described

An accordion-pleated pamphlet that describes and pictures each of the 16 different Hobart dishwashers and glasswashers has recently been published by Hobart Manufacturing Company, Troy, Ohio. The pamphlet introduces the complete line of equipment and contains tables that give specifications and complete mechanical descriptions of each machine, as well as operation diagrams.

• *When inquiring, refer to* **NS124**

Chain Link Fences

A new catalog describing Page fences has recently been published by Page Steel and Wire Division of the American Chain and Cable Company, Inc., Monessen, Pa. The sections of the catalog have been arranged so that the buyer can select the type that is best suited to his needs. Each section is complete with pictures and specifications.

• *When inquiring, refer to* **NS125**

Oil Burning Problems

A revised catalog describing its line of oil burners has recently been issued by Petroleum Heat and Power Company, Stamford, Conn. The booklet covers the design, production and application of the equipment in readable and easy to understand fashion.

• *When inquiring, refer to* **NS126**

Steel Heating Boilers

Bulletin No. 40 of the Lookout Boiler & Manufacturing Co., Chattanooga, Tenn., contains information regarding high firebox boilers of the mechanically fired, direct draft and smokeless arch types. In addition to the specifications for each type of boiler, the bulletin includes methods of selecting a boiler to suit the particular need and instructions on the installation, firing and general care of the equipment.

• *When inquiring, refer to* **NS127**

Rubber Mats and Matting

B. F. Goodrich Company, Akron, Ohio, has available a descriptive folder on various types of mats and matting. Featured in the folder are platform perforated mats that incorporate a pebbled design on the bottom side which allows muddy water to drain away quickly.

• *When inquiring, refer to* **NS128**

Address manufacturers for further information and prices—or use Readers' Service blank on page 85.

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NEW LITERATURE (Continued)

Midland Maintenance Materials

For cleaning, beautifying and preserving building interiors, the MIDLAND CHEMICAL LABORATORIES, DUBUQUE, IOWA, offers a variety of cleaning agents and supplies which are illustrated in an attractive brochure that has been recently published. It is available to administrators and custodians on request.

• *When inquiring, refer to* **NS129**

Workshop Equipment

The increasing interest in vocational training makes catalog No. 740 published by the NEW BRITAIN MACHINE COMPANY, NEW BRITAIN, CONN., particularly timely. Shop furniture and trade school equipment are presented in detail.

• *When inquiring, refer to* **NS130**

To Speed Up Food Production

New features in oven design are discussed in the folder on Vulcan multiple heat conduit baking and roasting ovens recently published by STANDARD GAS EQUIPMENT CORPORATION, 18 EAST 41ST ST., NEW YORK. Some of the improvements listed include automatic heat control for each section, smooth construction to facilitate cleaning and rock wool insulation to seal the heat inside.

• *When inquiring, refer to* **NS131**

Furnishing Home Economics Laboratory

In collaboration with the American Dietetic Association, E. H. SHELDON & COMPANY, MUSKEGON, MICH., has published a leaflet illustrating furniture for the food laboratory. Three drawings showing suggested layouts for the foods department are included.

• *When inquiring, refer to* **NS132**

Wire Goods Catalog

A new reference book on a varied line of wire goods, ranging from egg whips to broilers, has been issued by the METROPOLITAN WIRE GOODS CORP., 70 WASHINGTON ST., BROOKLYN, N. Y. More than 250 items are listed.

• *When inquiring, refer to* **NS133**

Importance of Proper Cleaning

J. B. FORD COMPANY, WYANDOTTE, MICH., has available an 80 page booklet on "Simplified Cleaning." Methods and materials for maintenance cleaning, dishwashing and culinary cleaning and laundry work are discussed and illustrated.

• *When inquiring, refer to* **NS134**

New Slant on Blackboard Problems

The result of much research work is the new "Blackboard Bulletin," presented by the AMERICAN CRAYON COMPANY, SANDUSKY, OHIO. It contains information on the latest developments in such problems as: care of blackboards; eliminating blackboard maintenance; reconditioning blackboards; sight saving, and choosing chalks.

• *When inquiring, refer to* **NS135**

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Side Glances—

THE new superintendent spent an evening at the cinema and came home with an idea. The operator had run a movie short backwards and Mr. Superintendent decided to try reorganizing the parent-teacher association by reverse action, the old one having died a lingering death of malnutrition. Read Supt. Wilford A. Nelson's story next month.

BEGINNING teachers need counsel on problems other than those purely curricular. One not often mentioned but frequently encountered has to do with religious prejudice. Sam H. Hale, superintendent, and Gertrude Barnes, teacher, will tackle this subject in September.

ASK your teachers to try this test, after having passed it yourself. Have them leave the classroom door open and suggest that they ask a fellow teacher to listen outside off and on for two or three days. The chances are that the teacher's voice during this period will be better pitched, less monotonous, fuller of force and vitality. Children respond readily, as indeed we all respond, to a pleasing voice. W. C. Bryant will discuss the subject next month.

THE most active opponents of beautifying the school site become the greatest enthusiasts over the results of a sound landscaping program, it is usually found. To help schools attain functional planning of grounds, we shall present in September a portfolio of school landscaping.

Published monthly by The Nation's Schools Publishing Co., Inc., 919 North Michigan, Chicago. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, $2; foreign, $3. Current copies, 25c each. Member Audit Bureau of Circulations.

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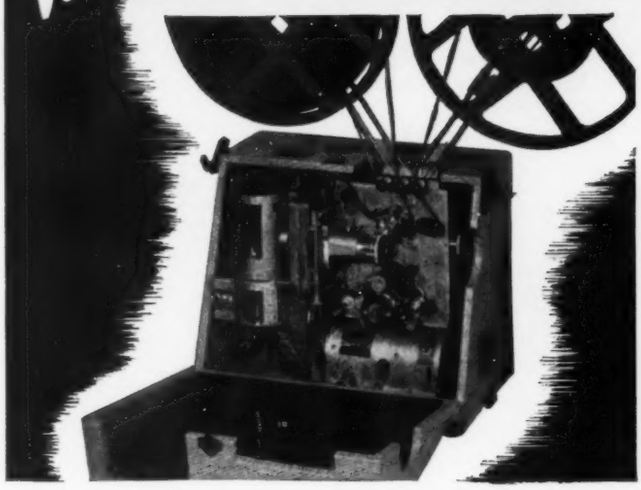

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The Victor Animatophone Sound Motion Picture Projector with its ***MULTIPLE-USE UNITS*** — EXCLUSIVE WITH VICTOR — is the ultimate in projector design. "***BUILT INTO***" the Animatophone are features backed by Victor's thirty-two years of experience and leadership. It incorporates every feature known to the industry plus many extra exclusive refinements. . . . . **With Victor there is NO COMPROMISE** WITH QUALITY—NO PREMIUM IN PRICE.

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Detroit Public Library

BETTER PLANT PRACTICES

Less Summer Maintenance

Summer maintenance, like everything else, is undergoing change. It is still with us, to be sure, but not to the same extent as formerly, when school repairs were religiously set aside for the vacation period.

New demands upon the school plant, with consequent shorter vacation periods because of summer schools, special courses and seminars, may be one reason for this change. Another may be an awakening realization of the fact that "it is more satisfactory to keep up than it is to catch up." Whatever the cause, there is no denying that school maintenance has ceased to be a two months' business and has become, instead, a sizable industry conducted over a twelve month period.

Even those school men who confess that they cannot handle maintenance this way because of local conditions agree that it is entirely logical. Major jobs that would disrupt class schedules must, of course, be postponed, but whatever can be done might better be done without delay.

L. G. Forth Agrees

Leo G. Forth, secretary, board of education, Burbank Unified School District, Burbank, Calif., is one of those who agrees heartily that this is the only way to handle maintenance and renovation properly.

"However," Mr. Burbank frankly admits, "there are many things that cannot be done while classes are in session, and week ends and holidays are not of sufficient length to allow their completion. Therefore, such jobs must be put off until the summer vacation period."

There have been occasions when Mr. Forth's staff has been able to refinish some floors and furniture during other holiday periods, thus completing a small part of the yearly maintenance program when time was not entirely consumed by emergency work. It depends upon the volume of repairs needing immediate attention. On the other hand, certain operations are regularly left until the summer holidays.

Some of these are: refinishing of desks and furniture; inside and outside painting of buildings, and complete overhauling of equipment, ranging from radios and projectors in the classrooms to machinery in the machine shops.

So Does John R. Sullivan

John R. Sullivan, superintendent of buildings and grounds department, Spokane public schools, Spokane, Wash., agrees with Mr. Forth. "Maintenance and renovation should be a year round program rather than being concentrated during the summer months," Mr. Sullivan states.

"Of course, there are some repairs and renovating jobs that cannot be done economically or without undue interference

Announcing

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with the operation of the schools. These must wait for the vacation periods."

A small part of Mr. Sullivan's yearly maintenance program is allocated to the Thanksgiving and Christmas vacation periods, but during the spring vacation of one week as much cleaning as possible is done without employing additional help. This reduces the volume of work necessary during the summer months.

Complete cleaning, treating and buffing of hardwood floors; painting and calcimining of classrooms and halls that cannot be done at any other time, and complete cleaning and overhauling of furnace and boiler interiors constitute the summer program. If further evidence were needed of the efficiency of such planning, similar endorsements might be received from J. Wilbur Wolf, business manager of Omaha public schools; John T. Cate, assistant superintendent, Glendale, Calif., and Arthur W. Clayton, business manager, board of education, Hoboken, N. J., among others.

As It's Done in Lynchburg

In the schools of Lynchburg, Va., most maintenance and renovation are done during the summer, E. F. Burmahln, director of business education, reports, unless some definite change or improvement has to be made during the regular school year.

During the Thanksgiving, Christmas and Easter holidays windows, light fixtures, picture glass, door glass, cabinet glass and desks are washed; floors are waxed, and all halls, stairways, lavatories and hall entrances are thoroughly scoured. Major repairs, such as repairing roofs, grading yards and painting buildings inside and out, are then left until summer.

It's Different in Houston

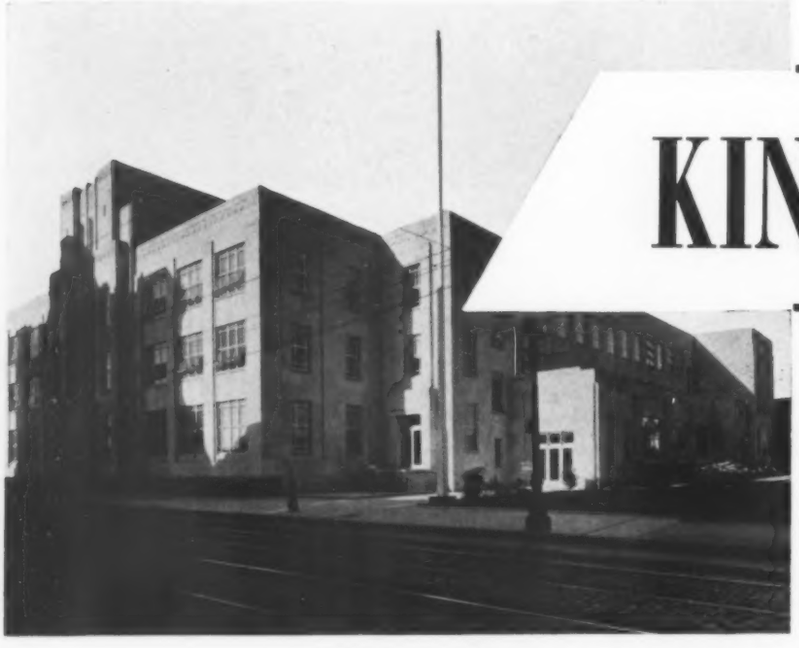
Conditions in Houston, Tex., make it difficult to maintain a year round program, at least to the extent that H. L. Mills, business manager of the Houston Independent School District, would like.

"We simply do not have the necessary help during the regular school year," Mr. Mills states. "Then, of course, if we did have the help, we would run into the problem of not being able to do much work in buildings that are crowded to full capacity. We follow the system of recruiting rather large crews of painters and plasterers from our regular custodians and allowing them to work during the summer months. One of the reasons for this is that our custodians are not on a twelve months' basis.

"Very little of our maintenance work is allocated to the Thanksgiving, Christmas and Easter holidays. About all that we do during these periods is to have our custodians try to give the buildings a thorough cleaning and scrubbing. Thus, there can be no material reduction in the volume of summer maintenance work. At least 90 per cent of our regular repair and maintenance work is done during the summer.

"I would not say that we follow the best system. I think it is necessary to understand local conditions. For instance, here in Houston where our custodians work only nine months in the year, it is essential that we try to be of assistance in finding employment for them during the summer months. Then, too, it would be impossible to do much repair work, renovation or painting in the school buildings during the regular school term because it is impossible to find even one vacant room in which children can be cared for while their own room is undergoing repairs.

"Also, we find that by taking those custodians who have formerly been painters and placing them in a summer crew of painters we get as much or more work done than if we employed regular day painters and, of course, get it done more cheaply. I realize that the various trade crafts would not recommend this plan but, after all is said and done, it comes down to getting the most for the money available."



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LOOKING FORWARD

Racism

RACISM is the belief in the biological and cultural superiority of one group of people over all other groups with which comparison may be made. As a theory and practice, it is not new but stems from prehistoric tribal localism. Its assumptions cannot be proved either biologically or anthropologically. Despite the fact that scientists believe that there are neither pure nor superior races, the adherence to the doctrine of racism has had and is bound to have profound effects.

The recent growth of nationalism has brought racism again to the fore, this time in more virulent form and with unusual political implication. The presumptions of superiority have not been limited to one national group but have been generally accepted by the Anglo-Saxon, the French, German, Latin, Slavic and Oriental peoples. Racism has taken different forms in different countries but it remained for Nazi Germany to express with atavistic brutality what other groups assumed as a philosophy or an attitude.

In the United States, Lothrop Stoddard and Madison Grant raised the issue of racism several decades ago. Madison Grant's erroneous writings had great influence in shaping the existing immigration policy which, contrary to American tradition, is now based on assumptions of racial superiority rather than on individual worth. These authors merely expressed what some Americans have always believed, *i.e.* that the Anglo-Saxon is superior to the other racial strains that comprise this nation.

The earliest expression of this philosophy may be found in the attitude of the English settlers toward the Indian. With the Redman disposed of politically and economically, this feeling of superiority has been transferred successively to the Negro, the Mexican, the Oriental, the Latin, the Slav and the Levantine immigrant. There is also growing evidence that the Jews are now included, a reflex of Nazism. These prejudicial attitudes toward segments of the American people are distinctly dangerous to our concept of equality of man and of opportunity. It is contrary to the fundamental American assumption of a classless society in which individual worth and achievement constitute the primary criterion.

Unproved and discredited racism has no place in American democracy! It particularly has no place in the American public school. This unique folk-made agency furnishes a common meeting ground for the harmonization of cultural differences and teaches the truth that there are no superior races and no pure races. Americans are racial mongrels to the same extent that all other races are; what may appear to be racial superiority is merely the result of more favorable environmental influences.

To assist the teaching profession in clarifying current misconceptions and attitudes, we strongly recommend the reading of Dr. Ruth Benedict's recent book, "Race: Science and Politics" (Modern Age Books). Doctor Benedict, associate professor of anthropology at Columbia University and a noted scholar, has brought together in dramatic form the valid scientific information concerning races and racism. She demolishes racism as a social, political and economic assumption with devastating effect.

Democratic Army

THE American attitude toward its armed forces has been peculiar. In times of emergency both Navy and Army are quickly and expensively built up to war needs and given full center stage placement. As soon as the emergency has passed, both services not only are rapidly reduced through normal demobilization but also feel the full weight of popular neglect. Vital appropriations for essential equipment, maintenance and personnel are difficult to obtain. It is the natural reaction of a democratic people that is suspicious of large professional armies and navies in times of peace.

This procedure is costly both in time and in money during an emergency. The hundreds of millions of dollars that were wasted in the years between 1917 and 1920 and the huge sums that are being spent during the current emergency are eloquent witnesses of this fact. Lack of comprehensive planning for adequate military establishments is always expensive.

It is doubtful whether the American people can return to this wasteful policy following the current emergency. There will be need for a sound preparedness program for generations to come. This statement does not assume the maintenance of huge and unnecessary military and naval establishments but does envision the continuing need for planning and the general train-

ing of youth in all branches of national defense service. It is reasonable to assume that selective service will be continued and made operative at the time of completion of secondary school work, or between the ages of 17 and 20. If training were given at the end of the secondary period, it would permit individuals to pursue their professional programs in college and university without interruption. It would also remove from the secondary schools junior R.O.T.C. units that are educationally of doubtful placement. It would permit concentration on technical and professional military requirements at the university level with radical changes of senior R.O.T.C. programs.

The induction of all youths into the Navy and Army for a year before entering their life work would provide other social and economic potentials. Modern warfare is a highly technical service and the year in the Army might serve as a vocational tryout period. Many young men could begin work at skilled trades while others developed competency in the numerous semi-skilled activities that are needed both in Army and in civilian life. Best of all, this plan has the possibilities of making the Army truly democratic and of offering career possibilities to many.

All types of service and placement in both Navy and Army should be opened to ability and proved capacity for leadership. Officer material could be selected through proved ability as displayed in the development of technical skills and leadership qualities instead of being limited, as in the present obsolete fashion, to political choices by congressmen and senators with a certain degree of consideration for physical condition and good intelligence.

Every man who expected to serve as an officer would be forced to rise from the ranks! When an individual's potential capacity for leadership had been determined, he would then be sent to the government training schools at Annapolis, West Point and other centers for advanced technical work. The old aristocracy of the Navy and Army would gradually disappear in terms of a more functionally sound procedure. The armed services would become more democratic in character and more thoroughly representative of all the people and might possibly be viewed more enthusiastically by them.

San Francisco Meeting

THE decision of the executive committee of the American Association of School Administrators to hold the seventy-seventh annual meeting in San Francisco next February deserves commendation and support from the membership. Year after year West Coast educators have uncomplainingly traveled east for these annual meetings, frequently crossing the entire continent to attend. The administrators have never met on the West Coast.

Even more important than the matter of fair play, the selection of the Bay metropolis for this event is of undoubted educational value. It will offer to many schoolmen east of the Mississippi their first chance to study the many unusual school systems on the West Coast, beginning at Los Angeles in the South and extending to Seattle in the North. Eastern educators are advised to make their stay on the West Coast sufficiently long to study these excellent western systems. We heartily support President W. Howard Pillsbury's statement that:

"It is our hope that the school administrators of the United States will find their meeting in San Francisco an experience that will bring them rich professional and cultural returns. At this time, when a common bond of sympathy and understanding is so essential, we believe that holding our national convention for the first time on the Pacific Coast, thus bringing the superintendents of the entire country to the West, will serve as a factor of no small importance in creating that unity so important to national morale."

Interest Representation

STUDIES of the social composition of school boards and the reaction of labor to low representation on urban boards have created considerable discussion as to the possible value of providing for interest-group representation, proportional representation and specific legal provision for units of representation. The arguments that these new methods might result in greater balance in representation and in serving diverse minority, as well as majority, community opinion have a certain amount of validity. It is doubtful, however, whether mere interest-representation provided on a mandatory basis would achieve the desired results.

The concept of the control of the schools is not in terms of specific interest areas but rather as an indivisible community activity to which all other interests are subordinated. Parents do not vote for school board members because they represent labor, capital or professional interests but because they believe that their representatives are capable of acting for them in the general direction of the schools.

Another means of attaining full interest participation is available through the use of advisory councils in each community. These might include representatives of the organized teaching profession, the association of parents, the parent-teacher association and a general community council and would act in an advisory capacity to the board of education.

This method has the merit of greater variety and flexibility and also makes for greater recognition of the partnership concept in public education by inviting the lay members of the community to participate in democratic discussion of their needs and to give advice with respect to the formation of desirable community policies.

The Editor

Speech Clinic Serves Three Groups

OLIS G. JAMISON and D. W. MORRIS

WITH unusually adequate facilities, Indiana State Teachers College this year is developing a threefold program of clinical and instructional work in the rapidly growing fields of remedial speech and reading. The college will try to improve the speech and reading habits of its own students; will service a surrounding territory of schools with corrective work for pupils who suffer from speech and reading difficulties, and will train enough capable speech teachers and reading teachers to meet the growing demand in public school systems for such personnel.

In the broad sense, a speech clinic includes its staff and field of operation as well as its own immediate physical plant. The program of the clinic has been implemented with a carefully graded theoretical and experiential curriculum on the graduate and undergraduate levels. Located in the heart of a modern laboratory school, which, in turn, is an integral part of the college, the clinic is in a position to develop an integrated program built to meet the speech and reading problems of persons of all ages, ranging from children in the kindergarten to students in the graduate school of the college and adults in the community.

The physical plant of the clinic has been planned to vitalize the educational aims of the clinic as conceived in the light of its relationship to the laboratory school, Indiana State Teachers College, the community in and around Terre Haute and throughout the state of Indiana, and the professional responsibility of the clinic.

Remedial Program. The clinic cubicles make it possible to give individual instruction to 14 students simultaneously, with graduate assistants, graduate and advanced students acting as clinicians. Offices are provided for supervising staff members and student clinicians. Records are kept at the secretary's desk. The facilities of the laboratories, recording room and darkroom are used for examinations and diagnosis. The social room serves as a center where those of like handicaps can share experiences.

Students with difficulties that are not of such nature as to call for individual instruction are approached through the classroom by means of a general speech improvement program.

A survey of the present sophomore class revealed that about half of the students need remedial training in speech or voice or both. For the college students who need individual attention because of the severity of their difficulties, instruction by advanced students and staff members is provided in the clinic cubicles. For those who need a combination of individual and group approaches the lecture room and seminar rooms also are used. The clinic cubicles are used as practice rooms, an instructor dealing with each student, in turn, by means of a high quality intercommunication system.

The clinic is a center of reference to which teachers, administrators and parents bring handicapped students for careful examination, diagnosis and treatment or suggestions for treatment. The laboratories are important for careful examination and diagnosis, while the clinic cubicles are used for treatment. The social room for speech defective persons provides opportunity for out-patients to make social contacts.

Instructional Program. A thorough training program is offered to those who wish to specialize in the correction of disorders of speech and reading. The entire clinic plant is used for this purpose. Especially important are the office for student clinicians, the reading room, seminar room, recording room, workshop, darkroom and clinic cubicles. The students obtain a thorough back-

The clinic works closely with the classroom program of the laboratory school. In the first grade, particular emphasis is placed upon pre-reading stimulation.

Doctor Jamison is director of the division of teaching and principal of the laboratory school and Doctor Morris is chairman of the department of speech and director of the speech and reading clinic, Indiana State Teachers College.

In the playroom atmosphere of the children's room, a 3 year old talks glibly of miniature replicas of his home environment. The clinician is enabled to study a spontaneous speech flow that could not be elicited in a more formal atmosphere.

ground in the literature of the field, experience in the laboratories and the professional maturity that can come only from handling all types of cases in a carefully controlled clinical situation.

All future teachers are given a minimum understanding of speech and reading disabilities that is sufficient to enable them to proceed intelligently in the classroom situation.

Research Program. A research program is designed to contribute to the stock of knowledge in regard to speech and reading disabilities. Well-equipped laboratories and working spaces make possible an intelligent research program. For such a research program subjects of various ages with a variety of disorders are available. This research program is articulated closely with the other aims of the clinic. Because of the breadth and educational importance of those aims it is possible to let the research program grow out of and form a part of them.

Equipment. The clinic is developing with the philosophy that modern scientific aids to learning should be employed to the maximum of their efficiency. Present and future installations of equipment contemplate the employment of such scientific instruments as are desirable for diagnosis, treatment, research and study.

An ophthalmograph for photographing eye movements during reading is located in clinic cubicle No. 4. For further examination and treatment telebinocular and stereopticon equipment is kept in cubicle No. 1; apparatus for orthoptic work and film and slide projectors are used in seminar and lecture rooms for training purposes.

Cubicle No. 2, which is soundproofed for testing hearing, contains the earphone and signal button of an audiometer that is located in a near-by room.

The phonetics laboratory is equipped with a master recorder and master amplifier. Recordings are made from the recording studio or from any of the clinic cubicles, each of which is acoustically treated. An amplifier in the phonetics laboratory connects with a microphone and loud-speaker in each of the clinic cubicles, providing an intercommunication system of high quality.

A tonoscope will provide students an opportunity to study the use of pitch and a power-level recorder will be used for the study of the use of intensity in speech. A high quality polygraph, located in the physiological laboratory, will be used for demonstrations and for research.

A viewing window provided with one-way vision that connects the office adjacent to the recording studio with the studio will provide opportunity for a study of situational factors in speech development and in reading habits. The window between clinic cubicle No. 5 and the lecture room will also have one-way vision for observation from the lecture room.

Between clinic cubicles Nos. 3 and 5 there will be a soundproof two-

Left: A graduate student reading an article photographed on 35 mm. film and enlarged by means of a microfilm reader. Right: In one of the cubicles a boy reads a story printed on a roll of paper that moves behind a slotted window. The movement of the roll can be regulated to the desired speed.

Right: This group of students is working on group articulatory exercises under the direction of the classroom teacher. Pupils with major deviations receive individual assistance in the clinic. Below: A student's speech is recorded from the recording studio as part of a program of study of the etiology of speech disorders and investigation of practical speech therapy methods.

way vision window for the teaching of lip reading to persons with normal hearing. This teaching procedure can be demonstrated to persons in the lecture room by means of the viewing window in clinic cubicle No. 5.

It is planned to make maximum use of audio, visual and audio-visual learning and instructional technics. The darkroom provides opportunity for the development of our own materials. The lecture room is fitted for sound motion picture projection and for slide projection.

The clinic library is equipped with a microfilm reader. A collection of the literature in speech correction and reading disabilities is being recorded on microfilm, which is stored at the counter and checked out to the students by the secretary. Also provided are teaching and demonstration materials, such as anatomical specimens, models, charts, rotator equipment and an oscillograph. Although we realize that many teachers trained in the clinic will go into school systems that are not able to provide equipment such as we have described, we feel that it is necessary for them to be acquainted with the

Left: Looking through the one way vision screen from the lecture room into cubicle No. 5. Unaware of an audience, the child strings "Binet beads." The microphone that carries the conversation is shown in the background. Right: An individual diagnostic hearing test.

Plan of the speech and reading clinic at Indiana State Teachers College. Instruction can be given to 14 pupils simultaneously in the clinic cubicles. The facilities of the darkroom, the recording room and the laboratories are used for making examinations.

equipment currently used in the better clinics if they are to understand the literature of the field and keep abreast of the times.

Layout of Clinic. The organization of the college classes of Indiana State Teachers College is in accord with that of good college organization. However, the place of the laboratory school in the college program is unique and must be explained in order to clarify the educational philosophy of the speech and reading clinic as a part of the whole educational institution.

The laboratory school on the college campus, with this latest addition of a speech and reading clinic, covers a regulation city block. The building is approximately 214 feet wide and 260 feet long. The first unit was completed in 1935. The second unit was ready for use in the fall of 1937. The third unit, the speech and reading clinic quarters, was occupied early in 1940.

The laboratory school is one of the largest structures of its kind in the United States. The total cost of the building, including the installation of equipment for all departments, classrooms and laboratories, is in excess of one million dollars.

Organization. The laboratory school is one division of the college. The administrative head of the school has the title of director of the division of teaching and principal of the laboratory school. Two assistant directors are responsible for coordinating the work of student teaching.

An assistant principal, who is also director of guidance, works directly with the faculty and students in curriculum improvement and for the general betterment of learning conditions throughout the school. Two other members of the faculty serve in a semi-administrative capacity, act as advisers to the students and also teach half time. In addition, the school has a faculty of 36 full-time and six part-time teachers.

The organization of the laboratory school in its relation to the college is unique in several respects. It is not organized solely as a part of the department of education. The heads of all departments become interested and participate more freely in the laboratory phases of the preparation of their majors because the school is not a branch of the department of education. Members of the laboratory school faculty are listed as members of the subject-matter departments in which they teach.

The head of the subject-matter department then, along with the director of the division of teaching, has the same responsibility for the type of instruction his teachers give in the laboratory school that he has for the instruction given by members of his staff in the college subject-matter courses.

The director of the division of teaching and his two assistants serve as coordinators of the laboratory phases of teacher education and have as their special duty the development of a close relationship between the subject-matter departments and the work in the laboratory school.

The laboratory school has an enrollment of approximately 800 children and maintains all classes from the kindergarten through the twelfth year. The boys and girls who compose the pupil body come, for the most part, from a zone of the city that surrounds the school. The college has a contract with the school board of the city of Terre Haute to furnish education for the children of this zone. In grade levels in which facilities are adequate to accommodate more pupils than are available in the zone, pupils outside the local district may be admitted with the payment of a nominal tuition charge.

Function. Although we have spoken of the laboratory school faculty as if it were a separate and distinct group, that idea should not prevail. In fact, there is no separate laboratory school staff. The qualifications of the teachers employed for Indiana State Teachers College must be such that they can serve in either the college classroom or the laboratory school. They are subject to assignment in either division and may be assigned to classes in both.

Whither the Superintendency?

ARTHUR B. MOEHLMAN

WITHIN a democratic culture all work is of relatively equal value and of relatively equal importance. The only distinguishing mark of superiority between individuals and groups is the degree of social and moral responsibility exercised by these individuals or groups in the use of their individual and social skills. The question of prestige, of isolation, of social snobbery, of personal gain at the expense of others has little place in the definition of a profession within a democracy.

A profession that is worthy of the name cannot claim privileges and immunities but gradually achieves professional status to the degree that it merges and forgets self in unselfish service to others. The conventional concepts of a professional group, which amount merely to "enjoying special privileges and prerogatives," should be replaced by the more social idea of enjoying responsibilities and possessing obligations.

If this argument is followed to its logical conclusion, it is obvious that a true profession in a democratic sense grows out of the social value of services instead of stemming from selfish assumptions or protective legislation. Statutes do not create professions!

Improving Professional Status

The public school superintendents organized as a special interest group within the National Education Association nearly three quarters of a century ago. Ever since that time there has been a tendency among the membership toward the improvement of its professional status. In recent years, particularly during the last decade, this tendency has been slowly gathering impetus until it might now, by generous interpretation, be considered a trend.

These yearnings for special prestige have been crystallized to some extent in the report of the Association Committee on Certification of Superintendents of Schools. Since the publication of the preliminary and final reports, there has been a growing desire on the part of a minority to implement some of these suggestions and recommendations. This minority urge may be currently interpreted as the desire of certain school administrators "to achieve a status comparable to that enjoyed by the other professions," presumably law, medicine and theology.

There still appears to be considerable haziness in these discussions, if not actual confusion, as to what constitutes a profession and also what is meant by "this status" for the teaching profession. Is teaching as a profession to be limited to university professors and to administrators or is it to embrace all teachers and specialized agents from kindergarten through our graduate schools?

Much thought has been devoted during this decade to improving the "professional status of the superintendent of schools" as distinct from the teaching profession as a totality. The inevitable conclusion is that the superintendent of schools is different and set apart on a hill from the principal, the teacher and the non-teaching agent. A consideration of certain theoretical, as well as fundamentally practical, aspects of the problem may serve to define more clearly the several issues and to chart procedures.

There are two major schools of thought with respect to the superintendent of schools: the empirical and the functional. The empirical may be subdivided into the paternalistic and the managerial, representing two stages in progressive evolution. The empiricist holds, with considerable pride, that his beliefs are "practical" while those of the functionalist are merely "theoretical." Since organization and activity grow out of function, it is difficult to see how a sound basic structure or practice can be erected except in terms of the reason for existence or sound theory. What the empiricist dismisses as "vague theory" is actually a logical conclusion drawn from analysis of purpose.

Followers of the paternalistic school of thought today are confined chiefly to the older generation of executives. The early executives were appointed not so much for their special technical knowledge as for their outstanding ability as teachers, their strong and impressive personalities and their ability to convince lay board members of their skill as leaders. Some of these men achieved position because of unusual gifts for political manipulation while others progressed because of discreet alliances with commercial purveyors to the schools.

These men considered themselves "fathers" of their teachers and maintained, depending upon individual personalities, either the benign attitude of the indulgent parent or the rigorously repressive methods of the autocratic, and frequently sadistic, one. The paternalistic tradition grew out of the autocratic and aristocratic concept of education which, in turn, had its roots in church tradition.

Influence of Business

Influences stemming from economic corporate practice have affected the thinking of superintendents within this generation evolving rapidly as the managerial point of view. Reduced to its simplest terms, the managerial concept may be described as that type in which the executive considers himself a special agent of the board of education, bearing the same relationship to the total organization that the general manager in industry and commerce bears to the board of directors. Not a few doctoral dissertations have been written expressing, elaborating and even belaboring this assumption.

As a result of uncritical acceptance of corporate practice, the superintendent has become too widely separated from the teachers and the teaching profession until today he frequently occupies a dubious position. The managerial concept has been strengthened among many of the younger superintendents through imitation of their predecessors and through instruction at many of our teachers' colleges and universities.

These men speak pontifically of "executive-teacher salary spreads,"

"personnel work units," "work loads," "production units," "my teachers" and "my schools," and there is much more pseudo-pedagese gibberish that chills the heart of the true teacher because it is so foreign to teaching. Much of this special terminology has grown out of the desire to imitate doctors and lawyers by using terms that are familiar only to the initiated. This creates mystery and what is frequently miscalled "professional aura."

Followers of the managerial concept are much better technicians than the preceding generation of superintendents but have made little if any progress in achieving an understanding of fundamental democratic processes and the need for the integration of these processes within executive organization.

A parallel minority school of thought is represented by those younger men who have gone back to the social studies for their interpretation of educational purposes and processes within democracy. Their approach stems from an examination of function. The functionalist holds that the American public school is a limited social agency that must operate in close cooperation with the home and other community agencies in the satisfaction of educational and social needs. The control of the school is vested in the people and is expressed through a lay board of education, which is primarily a social planning, appraising and interpreting agency. The actual operation of the school is a technical process that demands special technical requirements of its personnel.

Instruction Is Major Function

The supreme function of the school is instruction of child and adult. There is no other reason for its existence. The teacher came first and the work of the teacher is and must continue to be the school's most important activity. Any person engaged in direct instruction or in furnishing special services that facilitate instruction is functionally an executive and, therefore, a part of the total executive activity.

The custodian, the clerk, the noninstructional specialist, the principal and the superintendent must all be considered as a unity or entity in terms of educational purpose. Every portion of the executive personnel is of relatively equal importance to every other portion. Internal subdivision of executive personnel into operating, clerical, teaching and administrative is specialization which is demanded because of size but which in no way affects the unity or the purpose of the total activity. The teacher is relatively the most important agent and all specialized nonteaching certificated or noncertificated workers are merely facilitating or service agents to make the total process operate more smoothly and effectively. Organization is only a means and not an end in the achievement of educational objectives.

Administrators Are Teachers

From the functional point of view the specialist in administration is primarily a teacher, a coordinator and a leader assigned to special duty either for a limited period of time or continuously. His work has no meaning apart from instruction and he becomes a doubtful asset when he is separated from the rest of the teaching profession. Democratic instructional organization does not require a detached professionalized manager but an understanding and cooperative colleague who conceives of himself as a servant of instruction.

The managerial concept of master and worker evolved out of assumptions of incompetency in the teaching profession. The last generation has seen a greatly increased competence in teaching and the current generation will produce even higher teaching competency. Extensions of the training period and provision for broader and deeper education make these conventional assumptions of "managing to improve teacher competence" of doubtful validity.

The general popular acceptance of the idea of social security has also affected the teaching profession and is rapidly producing more systems of tenure and greater stability in the teaching profession. The gradual decline in obsolete restrictions against the marriage of women teachers will produce even greater stability and organizational strength. It is doubtful whether a strong and competent organization of teachers will continue to accept mildly outworn managerial concepts that have been lifted bodily from business practice.

If the general administrators, better known as the superintendents of schools, fail to recognize these fundamental changes and the need for greater democratization of the executive activity within the classroom in teacher-child relationships; within the individual building in teacher-principal relationships, and within the total system in teacher-principal-superintendent relationships, the public schools are bound for troubled waters. The already too great cleavage between teaching and administration will inevitably grow into a permanent conflict.

Under such conditions it will be impossible to maintain the impartial and classless concept of the public school. Senselessly autocratic and repressive administrative practices introduced in certain centers in recent years have already produced a large and still growing division between the teachers who are organized professionally and those who are affiliated with labor organizations. What the effect of this division will ultimately be upon public education no one can foretell. The responsibility for its growth lies directly with our administrators and boards of education.

Issues at Stake

The issues are clearly drawn. The superintendents, as a special interest group, may pursue the first path of increasing the gulf between the teachers and themselves by demanding special social and legal recognition as administrators, or they may view the problem much more deeply, avoiding the superficial values of personal or group prestige and bending their efforts to the advancement of the teaching profession as a whole.

Only as superintendents consider themselves teachers and as an integral part of the total profession will it be possible to democratize the schools to serve efficiently as the first internal line of defense for our democratic way of life. The paths are clearly marked. One can lead only to confusion and increasing difficulties; the other, to a true advance in democratic practices.

A true profession grows out of popular recognition of the disinterestedness of individual and group services. It cannot be built upon artificial and weak foundations of legal enactment and demands for a place in the sun. Only as the total teaching profession serves the people has it a claim to recognition.

Let's Put English First

CARROLL ATKINSON
Associate Professor, New Jersey State Teachers College

THE following letter was written by the editor of one of America's leading educational journals:

"Each year we read many hundreds of manuscripts from high school administrators and teachers and from professors and instructors in teacher-training institutions. A large percentage of the manuscripts has faults in grammar and rhetoric that range from mildly bad to shockingly bad. And the percentage does not seem to vary much, whether the manuscripts are from obscure teachers in small towns or from the star performers in our big school systems and colleges.

"Our general impression has been that high school English teachers punish the English language somewhat more than teachers of other high school subjects."

When you add this condemnation from a prominent educational journalist to the continuous complaints of business men who seek some degree of clerical service from high school and college graduates, it would appear that it is about time for the English teachers themselves to do something about it. This is especially true because English is the one school subject that, with rare exceptions, has been required in every academic course.

What type of instruction are young Americans given at the present time? They get a smattering of literature, often of ancient vintage; an occasional feeble effort to impress upon them some of the rules of grammar in a cold metallic manner; the assignment of some themes that too often are written upon subjects of no interest to the pupil-writer himself. All this makes up the usual English instruction. To make the class a complete mental hash, the dear teacher often generously throws in some of the gruesome details of her latest trip. The result has been that the vast majority of our young people go into the world to earn a livelihood without having mastered either written or spoken English. What is the cure for this condition? I should like to see every school subject revolve around the definite practice of using good English at all times, regardless of what is being studied. I believe that English expression should receive the primary emphasis in all courses. Naturally, the history teacher may resent the necessity of interrupting an important factual discovery just to correct a "you was," and heaven only knows what the mathematics instructor would do to an "I ain't" in the middle of the explanation of an alegebraic equation. A definite administrative policy in some schools, however, has accomplished this very thing — making English usage the primary emphasis within an education.

English as it is punished by the products of the American public schools arouses the author to plead for reforms in the teaching and in teachers of English

The amount of literature study in the required English courses should also be banned or at least minimized. Class time and effort should be consumed in practicing oral expression and in developing written work, both of which should be controlled by ever-alert, though sympathetic, critical evaluation. The ultimate ideal is to make the pupil so critical of himself that he is constantly on the lookout for his own errors. Every pupil should be made ambitious to express himself well in properly accepted English.

Literature has great values for those who are capable of appreciating them. In this respect the old adage of taking the horse to water but failing to make him drink holds remarkably true. Evidently, the forced exposure of our English classes to "culture-creating" literature has backfired. The products of the American school, when the educational authorities no longer can insist on their reading "The Lady of the Lake," apparently choose to peruse "detective tales" or "love romances" at 10 cents a copy.

Too often in the past the major stress in required English instruction has been placed upon reading that the pupil regards as ancient verbiage rather than upon building correct language habits. Sooner or later, the traditional English teacher must face the fact honestly and squarely that only a small percentage of the boys and girls going through our modern American educational mill is intellectually fitted to absorb many values from literature study. The logical conclusion is that literature should be reduced to a minimum in the required English courses and made an elective study for those individuals who will reap rich values from the study thereof.

The final suggestion is that we seek definitely to improve the English teachers now in service, as well as those who are training to enter the profession. One of the tragedies of the topsy-turvy development of American education has been the fact that many would-be teachers, because they have taken certain courses in the field of English, think they are qualified to teach an English class when such an opening occurs. Into the classroom enters Miss Half-Prepared to instruct children in the most important part of their school work. The English used by some of these so-called English teachers definitely needs improvement. If this is not believed, 20 English classrooms selected at random from any typical school system should be visited. Such a trip generally will suffice to convince the visitor that correct English usage "ain't being taught."

When, and if, these proposed reforms can be translated into action, it is fairly certain that future editors of educational journals will have less excuse to express themselves along the lines quoted at the beginning of this article.

RAYMOND L. COLLINS
Principal, Wappingers Central School
Wappingers Falls, N. Y.

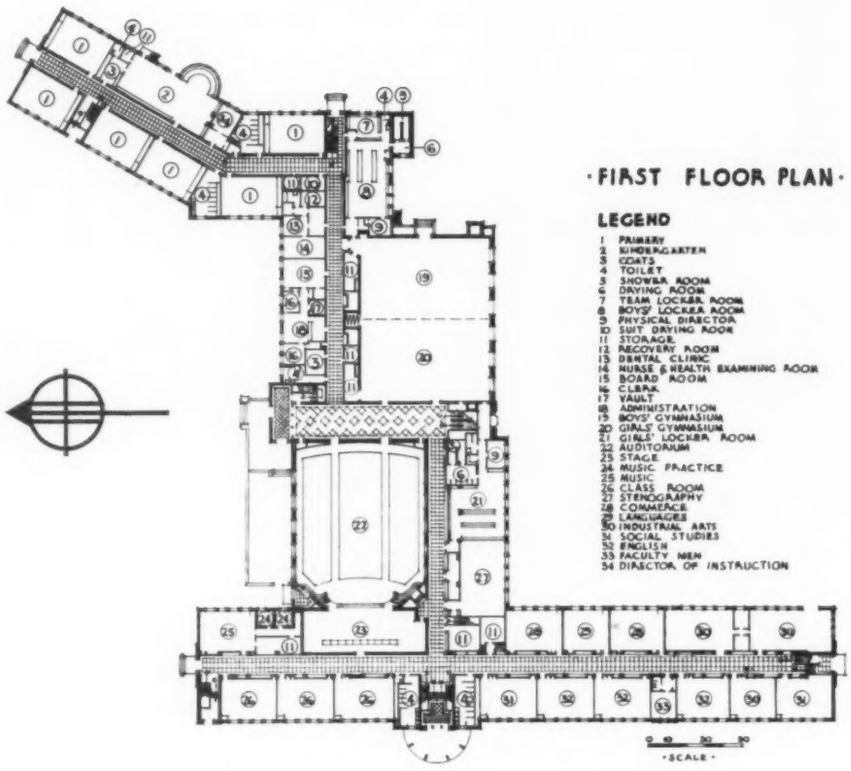
Dutchess County

THE territory lying south of Poughkeepsie, N. Y., in southern Dutchess County, had practically no school facilities of a modern type in 1938. In this area there are many small communities near the larger central village of Wappingers Falls, which has a population of about 3500.

It was necessary to unite the views of the people of the old stock, descendents of families who had settled here hundreds of years ago, with those of a comparatively recent European emigration. After long and earnest discussions, the final vote of 1259 to 819 in favor of centralization brought these two groups together. Immediately, officials began the planning and construction of a million dollar elementary and junior-senior high school, which was ready for occupancy in September 1940.

The building program established by the local and state educational authorities was based on an anticipated enrollment of 35 pupils in the kindergarten; 525 in grades 1 to 6; 200 in the seventh and eighth grades, and 500 in the ninth to twelfth grades, or a total of about 1260. The actual enrollment in September 1940 proved to be 1200.

The 33 acre site selected just south of the village of Wappingers Falls was irregular in outline and profile, with road access from the north and



OUTLINE OF CONSTRUCTION DETAILS

CONSTRUCTION: Modernized Georgian architecture. Exterior, light red shale brick with limestone trim; built-in membrane dampproofing. Fire-resistive throughout. Foundations, concrete. Interior partitions, cinder concrete block. Roof decks, 20 year bonded pitch and slag laid over gypsum planks. Sash, gymnasium, mechanically operated architectural-projected steel.

Interior view of the auditorium looking from the balcony toward the stage.

FLOORING: Corridors, terrazzo with precast stair treads. Toilets, locker rooms, showers, janitors' closets, ceramic tile. Classrooms, northern hard maple strip flooring-stages, edge grain pine. Kindergarten, cafeteria, administration, health and faculty rooms, corrective gymnasium, auditorium aisles and music room, asphalt tile. Gymnasium and shops, end grain wood block. Cafeteria kitchen, quarry tile. Library, rubber tile.

WALLS: Corridors and classrooms, integrally colored plaster. Gymnasium, face brick. Auditorium, kindergarten, lobby and science rooms, painted plaster. Homemaking suite, wall paper.

WAINSCOTS: Corridors, 16 by 16 inch glazed terra cotta. Toilets, glazed tile, marble compartments. Lobby, auditorium and principal's office, painted woodwork. Gymnasium, sheet cork on end walls. Cafeteria, asphalt tile with aluminum chair rail.

CEILINGS: Rooms, corridors, acoustical tile.

LIGHTING: Classrooms, semi-indirect controlled by photo-electric relays. Shops, science rooms, corridors and gymnasium, flush and semiflush recessed fixtures with prism lenses. Stage, five rows of borders, spots and disappearing footlights.

COMMUNICATION: Complete telephone system; combination public address, radio and phonograph.

HEATING: Oil burning boilers.

VENTILATING: Classrooms, unit ventilators. Gymnasium and auditorium, central fan supply and exhaust.

Centralizes

EDWARD C. SMITH, DON P. EMLEY and PAUL WOOD
Architects

South wing of the new combination elementary and high school at Wappingers Falls, N. Y. The exterior is light red shale brick with limestone trim.

south sides of the property. The elementary school was placed to the east and the high school to the west; the two buildings are joined by a central block containing the elements that are commonly used by pupils of all ages and are also used by the public.

The main public entrance is through the tower door at the north central part of the building to the simple and colorful main lobby, which serves both the gymnasium and auditorium and the adjacent administrative and health units. The main lobby is also entered directly from the large parking area south of the gymnasium. There are six entrances that may be conveniently used by pupils arriving or departing by bus.

In the elementary school are 16 classrooms, the kindergarten, the office of the grade school supervisor, faculty restroom and toilet, pupils' toilets and storerooms. Each of the classrooms is equipped with bookcase, teacher's and pupils' wardrobes, blackboard and bulletin or display board and a work bench and cabinet about 6 feet long. The primary grade rooms have sinks in these work benches.

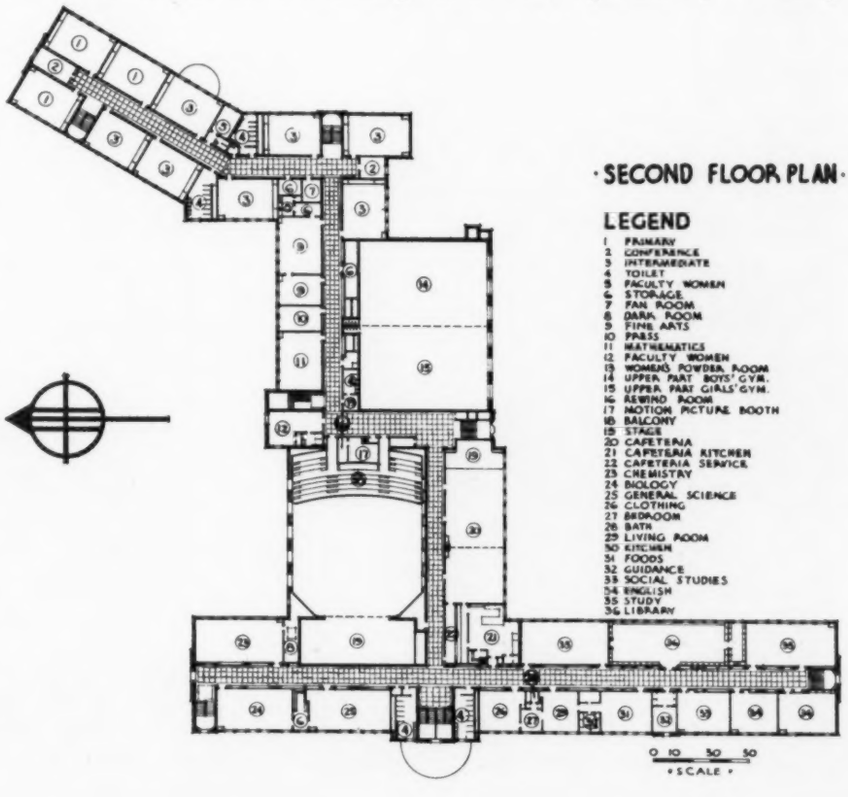
In the high school section the shop on the first floor is divided into two spaces, one for textiles, woodworking and electricity, and the other for printing, ceramics, metal working and automotive instruction. Two teachers are now working in these shops with a capacity enrollment.

The three unit homemaking department provides space for a food center, a clothing center and a model apartment that consists of a kitchen, living and dining room, bedroom and bath. The apartment is furnished with well-selected furniture and is given a domestic character with distinctive wall paper.

The library, located on the second floor between the two study halls, provides easy access from both study halls and general classrooms without its becoming exclusively a study room. The librarian's workroom also serves as a small conference or seminar room. Opposite the library is the office of the director of guidance. Adjacent are rooms for senior high school English and social studies with the necessary easy access to the library.

The cafeteria on the second floor of the central part of the building has a seating capacity of 280 and has a single service line counter in a space separated from both the kitchen and eating spaces. All of the cafeteria tables are of the folding type with linoleum tops.

A stage at one end makes possible play or choral rehearsals while at the other end, separated by a folding



partitition, a class or other group meeting may take place.

The kitchen is fully equipped with three hotel gas ranges, bake oven, vegetable peeler, mixing machine, refrigerator, dishwasher and large tables and sinks, most of which are stainless steel. Kitchen supplies are handled from the ground floor service entrance on a large electrically operated dumb-waiter; wastes are disposed of in a flue-fed incinerator.

The gymnasium is divided by an electrically operated folding partition into two 45 by 70 foot spaces, one for boys and one for girls. Each is supplied with ample room for the storage of apparatus. Six row folding bleachers on each side of the entire gymnasium provide seating for spectators of interscholastic games. The dressing and shower rooms are directly accessible from each gymnasium on the same floor level so that no one passes through corridors or uses the stairs in going from locker rooms to the gymnasium. There are a separate team room for the boys and a ventilated suit-drying room.

Across the lobby, the auditorium presents a striking appearance with its deep dull red walls, white wood wainscot and trim, gold colored draperies at the windows, side panels and proscenium and its 1064 comfortably upholstered green seats. The stage is 23 feet in depth behind the proscenium wall, with a short apron. The proscenium opening is about equal to the combined wings and has a tableau curtain. A fly gallery with pin rail is provided with adequate equipment to handle scenery. Storage space below the stage is reached through trap doors and basement corridors. Adjacent to the stage is a completely sound-insulated music room with two practice rooms and a large instrument storage room. The auditorium is equipped with a concert piano and an electric organ. Two portable 16 mm. projectors in the booth provide for continuous sound motion pictures on a large screen. These machines may be used in classrooms and other special rooms throughout the building.

On the first floor, as close to the center of the building as possible, are found the administrative offices and the health suite, which are adjacent. Opening from the waiting room of the health department are a completely equipped dental clinic, general examination and nurse's room, a small restroom, a storage room and a toilet with a shower.

A large site has been well planned to permit full use of its possibilities. The initial landscaping is adequate for the present, although the entire projected development will be accomplished over a period of years. There are athletic fields for baseball and football, a playfield for primary classes and boys' and girls' playgrounds. Provision has been made for the future installation of tennis, badminton and other game courts.

Top, left: The library is planned to make research work easy for the pupils. Top, right: Music pit in the auditorium. Below, left: A corner of the woodworking shop. Below, right: Pupils setting type and printing in the print shop.

A Town Goes to College

STILLWATER, MINN., is a quiet little town, boasting a population of approximately 8000 people. Perched high on the banks of the St. Croix River about 30 miles out of Minneapolis, it is one of the oldest cities in Minnesota. It was there that Donald Watt, director of the Experiment in International Living, decided to locate his midwestern work study camp in the summer of 1940.

The college is an outgrowth of the work conducted by the Experiment, which had its beginnings in Putney, Vt., several years ago. Aiming "to build up in various countries a group of people who are interested in promoting mutual understanding and respect between their own and other countries," the Experiment has made it possible for American students to live in European homes and to share in the recreational and social program of the community.

For eight summers the Experiment conducted tours abroad, but with the coming of the war a plan of home work and study groups was developed. The Goddard College campus, Plainfield, Vt., was the scene of such an experiment during the summer of 1939. This first session was so successful that the Experiment decided to maintain three such encampments during the summer of 1940. One was located at Plainfield; another, at Hidden Villa ranch, 10 miles from Stanford University, and the third was established at Stillwater.

The third group had three objectives:

1. To satisfy the curiosities of American students, including those from the East, in regard to European culture, through direct contact with European scholars in and out of classes; to aid them in understanding the kind of life people in the Middle West live, and to teach them to use their leisure time for creative and refreshing activities.

2. To give the faculty an opportunity to interpret Europe to their students and to give them an opportunity to know the American language, people, communities and customs so that they can more easily adapt themselves to the American way of living.

3. To bring a stimulation and enrichment of life to the community through classes and personal contact with the newcomers.

Language classes at the Stillwater Community College were small enough and informal enough to provide the students with many opportunities to speak the language they were learning. Here, Dr. Klaus Hilzheimer of Vienna, seated in the center, has moved one of his German classes—books, students and all—from the classroom out onto the shady lawn that surrounds the high school.

VIRGINIA MENNING

The establishment of the midwestern college was beset with difficulties. In April 1940, when Mr. Watt went to Chicago to find a location for the group, several college campuses in Minnesota and Wisconsin were suggested, but none seemed suitable. Finally, at the suggestion of Milton McLean of Macalester College, Mr. Watt put his proposition before the townspeople of Stillwater.

Turned down by four civic organizations, he and Carl O. Olson, a Stillwater minister, succeeded in gaining the support of the Lions' Club. Some of the members realized the possibilities of the plan and a committee of six, chosen to represent the city's interests and headed by Mr. Olson, was selected. Later, a seventh member, a Rotarian, was added, and after receiving the approval of the community, the group became known as the Citizens' Committee.

The committee was empowered to set up other necessary committees for organization. Their first job was to start publicity for the group and thus to gain the attention of as many local groups as possible. They succeeded first in gaining the support of the business men's association and the board of education.

The next task was to bring the women of the community into active participation in the program of the college. Committees on housing and hospitality and a committee to interest and enlist local students were organized.

The work of the last named committee did not run as smoothly as supporters wished, for most of the

town's young people of college age were away at school and it was not until the middle of June that enough of them appeared at any of the meetings to show that they were interested in such a project.

Numerous prejudices further hindered the establishment of the school. Many townsfolk feared that the foreign faculty might be connected with Fifth Column activities. Many failed to recognize the city's need of a new outlet for creative energy and still clung to the opinions that had made their ancestors choose a state prison rather than a university when Stillwater was still a great lumber town 50 years ago.

Work Project Undertaken

Most difficult to overcome was the citizens' disapproval of the work project, the turning of a ravine near the high school into a tennis court. However, the idea behind the project seemed vital to the college for it was the only tangible way that the students could show their appreciation for the use of the school buildings and for the hospitality of the community. As the summer progressed, this antipathy for the project was broken down and many of the town's young people joined in the work.

On June 14, the group received a letter from Mr. Watt stating that not enough eastern college students had enrolled to make the group a financial possibility. Mr. Watt had two problems to consider: that of not letting down the faculty members who had already been engaged and of not disappointing the community. It was at this time that the idea of a community college with a plan for adult education was suggested.

Originally, the idea had been that 20 eastern college students would pay $135 for the eight weeks' session. These students would be housed free of charge by the townspeople. In return, all of the members of every family that acted as a host to outside students would be entitled to attend classes at the college free of charge. If the family that was acting as host had no members of college age, it would be entitled to nominate a Stillwater student to attend the school.

Now the plan was extended to admit anyone who desired to attend, on the payment of $3 a week for each family. This fee entitled all the members of the family to attend classes.

On July 2, 1940, the school finally opened. Total enrollment included 25 visitors and more than 100 Stillwater townsfolk whose ages ranged from the late high school years up to the fifties.

Lincoln H. Clark of Chicago and his wife were appointed directors of the college at Stillwater. There were 11 foreign professors, principally from central Europe, 11 eastern college students and one student from Czechoslovakia.

The program offered was varied. Several of the professors gave language courses in French, German, Italian or Spanish. The courses were not designed to assist a student in making up a course that he had failed elsewhere; instead, they were to give the students familiarity with the spoken language. There were both beginning and advanced classes and the opportunity for conversation was great in the small classes that were held.

Variety of Courses Offered

Courses in fine arts, music, photography, vocational guidance, dramatics, Minnesota history, religion and international affairs were among the other subjects offered. Each student learned only as much as he wanted to, for there were no strict examinations, no rigid rules, no set syllabuses that had to be covered. Those who attended the classes were there for their own betterment inasmuch as no credit was given in other colleges for the work done during the session at Stillwater.

Classes were held in the mornings and evenings, Mondays through Fridays, while the afternoons were devoted to the work project and to recreation. Most of the students helped shovel dirt, cut down trees and haul away wood in order to clear and to fill in the ravine. The project turned out to be too much of an undertaking, however, and the college closed the year leaving Stillwater a badminton court instead of the originally planned tennis court.

The classes were scheduled to be held in the classrooms in the high school but, more often, on nice days the faculty and students moved out onto the shady lawns surrounding the building and relaxed while learning. All classes were informal.

Students who did not help with the work project did kitchen police duty. All meals were taken in the activities building of the high school. Students dried dishes, swept floors, cleaned vegetables and washed blackboards. The actual cooking for the group was done by a University of Minnesota home economics graduate, Eleanor Benson; Josephine Lies, director of domestic science at Stillwater High School, acted as dietitian.

Classes and the work project were not all that occupied the students' time. Every Saturday evening they sponsored folk dances for the townspeople; Sunday evenings were given over to community singing in one of the town's picturesque parks near the river.

Visitors Explore Countryside

Excursions were planned for the week ends in order to acquaint the strangers with this section of the country. The longest trip was up to the Mesabi Iron Range. There the group saw the biggest open-cut iron mining operations in the world and had a chance to study firsthand the highly organized cooperative system on the range.

The group visited the Minnesota State Prison at Bayport; some floated down the Apple River on inner tubes from Somerset, Wis., and all attended several picnics.

Two plays and two recitals were presented by members of the college, in addition to the operetta "Pinafore," which was given three days before the school closed its doors for the year. The cast was made up entirely of members of the college who had been rehearsing in choral groups all summer. This was the only production to which the college charged admission. From the profits the faculty members received transportation money to return home.

The college closed on August 24 and the town will probably never be the same again. An indelible impression was made on the townspeople whether they realized it or not. The awakening of interest in the classics and in music, particularly, was evidenced by the increasing numbers that attended the community sings and folk dances and by the huge turnout at "Pinafore."

Parents Make Good Partners

An Experiment in Sharing the School

CARLETON M. SAUNDERS
Principal, Ocean Grove School, Ocean Grove, N. J.

UNLESS workers in the schools and in other institutions of the United States can evolve new technics to make democracy really work, and work efficiently, our present form of government may be supplanted by something less desirable. It, therefore, becomes the supreme duty of professional educators to lead in the search for new channels and means of intercommunication between educational institutions and their patrons.

As custodians of youth, working along with parents, the schools have been authorized to prepare the future citizens with democratic procedures through and by which democracy can grow and strengthen itself. Education in the democratic manner is the foundation on which our culture is based. In these troubled times, particularly, education must be on the alert to devise better methods of perfecting democracy.

Work With Parent Groups

Among the many schools of this country that are experimenting with new technics of interpreting their work to the parents is the one at Ocean Grove, N. J. Here, beginnings have been made by working with parent groups on school and community problems. First of all, the school established the policy of working with the parent groups, rather than adopting the attitude of "telling" the parents or of "selling" them an educational bill of goods. The distinction is important, for one is the democratic method while the other symbolizes the autocratic way of educational administration.

The parent-teacher association seemed to offer the logical starting point for an attack on the problem of evolving new democratic technics, particularly because many members of the organization were demanding a change in the formal type of program that had been given previously.

The principal, who was new to the school and, consequently, could take the lead with less hesitation than one who had resided in the community for a longer time, was asked to meet with the executive committee of the association for the purpose of arranging a program for the nine monthly meetings of the organization for the ensuing school year. Because of the obvious desire on the part of the executive committee for something different, the principal proposed that he be responsible for the November and January meetings.

The first meeting was divided into three parts: (1) a thirty minute talk by the principal; (2) a forty-five minute period in which parents visited the classrooms and not only saw examples of their children's work but discussed with the teachers general problems of education or of the school, and (3) a period for refreshments in the school cafeteria.

This meeting required much preliminary planning to assure its success. Time and effort were expended in gathering pertinent data for the principal's address. Emphasis was placed upon the phases of the school in which its patrons were most interested.

Parents Offer Suggestions

Despite the fact that the majority of parents believe they know exactly what education Junior should have (possibly because they have gone through the educational mill and, therefore, think they can speak with authority), they usually desire a better education for their children than they themselves have. Consequently, parents are eager to offer suggestions and soon reveal their hopes and desires for their children's education. Thus, the principal was able to obtain some of the points for his talk directly from parents. He gathered other information on the subject from teachers who knew the parent body well.

The teachers prepared for their part in the program at a staff meeting in which they discussed various phases of the educational program in which the home could be of greater help to the child by cooperation with the school.

Inasmuch as this was the first experience with such a program and as special times were set aside for parents to discuss their children with teachers, it was decided to talk with the parent groups about general educational problems or such aspects of these problems as directly concerned the school rather than to utilize the time for a discussion of specific problems of certain children.

Points of Interest Evaluated

The group meetings were used also as a sounding board to find phases of the school curriculum with which parents were concerned. Later, another staff meeting was held to discuss and evaluate these points of parent interest.

Refreshments were supplied and served by a committee of kindergarten and eighth grade parents. The two classes were grouped for a dual purpose. In the first place, the parents of two classes could provide and serve refreshments with less difficulty and expense than the parents of one class. Second, a combination of these two classes permitted parents of children who had been in the school for many years to initiate those whose children had just entered. Thus, barriers of diffidence and shyness were most easily broken down and parents who were newcomers to the association were given a feeling of belonging.

It also gave all of the parents a feeling of participation in the meetings, particularly those who had recently entered the community.

The January meeting of the association was an imitation in many respects of "Information, Please." Our board of experts included two members of the board of education; the superintendent of schools; the

business manager; the president of the parent-teacher association; the principal of one of the elementary schools; the principal of the high school, and a teacher. The principal of Ocean Grove School acted as master of ceremonies.

At the outset it was realized that the performance would not be successful unless questions could be obtained from the parents. Constructive questions that would provide a basis for lively discussion were desired; otherwise, the evening would be wasted and the program of school-parent relations would receive a serious setback. Five technics were utilized to obtain a variety of questions:

1. A box with pencil and pad and a sign asking for contributions was placed in one of the classrooms at our Christmas parent-teacher tea for new members. Written announcements before the tea and oral appeals at the tea helped to obtain a few questions worthy of discussion.

2. Questions that parents had raised at the November parent-teacher meeting were used.

3. Teachers kept lists of any questions that parents asked them in conversations regarding the school.

4. The principal obtained questions from parents who visited the school throughout the regular school sessions. He had inaugurated a policy of asking 10 families to visit the school every Wednesday at which time conferences with the visitors were held and policies discussed.

5. A letter was sent to each family appealing for questions regarding the school or the school system. Anonymous questions were permitted because it was felt that this procedure would make for more freedom in questioning certain aspects of the school work. These anonymous questions were placed by children or parents in a mailbox in the hall.

As a result of the experience with two parent-teacher association programs, certain conclusions were patent.

1. Parents desire to become acquainted with modern educational theories and practices. Educators and education have moved so fast within the last decade that many parents are behind in their thinking. Thus, in some communities, better practices are forsaken for older, more secure methods.

2. Parents make good partners in this business of education. Someone has remarked that one does not take in new partners when business is good but the old maxim of two heads being better than one still appears to hold true in human relations, especially when one head belongs to a layman and the other to a professional educator. And, maybe, business could be improved!

3. Small groups of parents are better to work with than large groups. More work is accomplished. Everybody's business becomes nobody's business. Parents are more likely to enter into a frank discussion and express themselves in small groups than they are when the gathering is large.

4. A program of school-parent relations tends to make the teacher more professional. He becomes interested in the child and human problems rather than in subject matter and book knowledge. In other words, he becomes less academic and more concerned with out-of-school activities of the community which, in many instances, are of more concern to children than those that belong solely within the school building. He realizes that the parent has many of the same problems. Neither knows all of the answers but, cooperatively, they may be able to find some of them.

5. As a result of closer cooperation between the school and the parent, the objective of education—to help the child become a better individual—is easier to achieve.

While the methods of sharing the school with parents described in this article may be indigenous to a specific locality, they could be used as a starting point by other schools in interpreting their work to parents. The sum total of such methods would add strength to our democracy and bring the schools closer to the people and the people closer to the schools.

Purpose of High School Programs

NEARLY one person in five is not sure of the purpose of the high school program, it was revealed in a poll of public opinion on the question: "Do you think that our present high school programs are planned mainly for the students who are going to college or for those who are not going to college?"

The poll was conducted under the auspices of the American Youth Commission and the results were published by the National Education Association.

Thirty-nine per cent of the total population thinks that secondary school programs are planned both for those who go to college and for those who do not; 34 per cent thinks they are planned for "college only"; 8 per cent believes that high schools are planned for those who are not going to college, and 19 per cent has no opinion one way or the other.

Combining the percentages in one way, it is apparent that 73 per cent of the population recognizes the college preparatory function of the high schools. Another combination of percentages indicates that 47 per cent recognizes that high school programs are planned to include those who do not go beyond high school.

The great proportion of indecision is striking. However, it was noted that those with higher educational status are less likely to be undecided. Only 2 per cent of the former college students under 30 years of age who were polled has no opinion. One person in six has no opinion among those more than 50 years of age in the high school group; nearly a third of those who had less than high school education are undecided as to the main purpose of existing secondary schools.

In all educational classifications young people are more likely to express a definite opinion. In general, they are divided about equally as to whether high school programs are planned solely for college preparation or for both college and noncollege students.

It is a significant fact for educators that so many people think that high school programs are designed solely for college preparation. Perhaps most adults tend to think of school functions in terms of their own individual experience.

Mansfield Sets an Example

W. H. KAHLER
Illuminating Engineer, Westinghouse Lighting Division, Cleveland

A TYPICAL application of up-to-date lighting methods is found in two new schools at Mansfield, Ohio. Last year Mansfield, which has a population of 36,000, invested more than a million dollars in constructing two new junior high schools and in improving the athletic field.

The two new buildings, known as the Johnny Appleseed and John Simpson junior high schools, are not elaborate in an architectural sense but are attractive and utilitarian in design. Particular attention was given to planning pleasant, healthful working conditions for pupils and teachers with lighting adequate for severe, tedious visual requirements.

Classrooms are 20 by 30 feet, with 12 foot ceilings. Each is lighted by six 300 and 500 watt totally indirect units. Over desks near the windows 300 watt units are employed; away from the windows is a row of 500 watt units. Initial lighting intensity on desk tops was from 28 to 30 foot candles; with regular cleaning the level can be maintained around 20 foot candles or more.

The art room is 17½ by 24 feet and has a 12 foot ceiling. Six indirect luminaires maintain a lighting intensity of 28 foot candles. As in classrooms, 300 watt units are used near windows, with 500 watt units farther away.

The library, a room 22½ by 44 feet, with a 13 foot ceiling, was designed to effect both seeing comfort and an environment conducive to reading. Light and architecture are combined in this room to give an atmosphere conducive to study. Eight 500 watt luminous indirect luminaires supply a lighting level of 23 foot candles.

In the library light and architecture are combined to obtain the desired effect. In the 22 by 30 foot music room, light and acoustical treatment are used to afford proper working conditions. The 12 foot ceiling is covered with 12 inch square cork acoustical material in a pattern of alternate white and cream blocks. Walls are finished in buff plaster. Six totally indirect luminaires light the room at an intensity of 15 foot candles.

School Lighting Recommendations of Illuminating Engineering Society

LOCATION	MINIMUM FOOT CANDLES
Classrooms, on desks and blackboards; study halls, lecture rooms, libraries, on desks and tables	15
Offices, on desks	15
Sewing rooms, drafting rooms, art rooms and other rooms in which fine detail work is to be done, on the work	25
Shops, laboratories, on the work	15
Gymnasiums, main exercising floor, wrestling, playrooms, swimming pools, basketball, handball, boxing	15
Auditoriums, assembly rooms, cafeterias and other similar rooms not used for study	6
Locker rooms, corridors, stairs, passageways, toilets and all indoor areas traversed by pupils	4
Sight-saving classrooms, on desks and blackboards	30

Studies are 22½ by 45 feet in size and have 12 foot ceilings. Lighting intensity of 20 foot candles is maintained by 300 to 500 watt luminous indirect incandescent fixtures.

The cafeteria was planned to accommodate 260 pupils for lunch every twenty minutes. This capacity necessitates rapid movement and minimizes delays. Lighting must be adequate for quick selection of food and must also present a pleasant environment. A level of 15 foot candles is supplied by 500 watt totally indirect luminaires on 12 by 12 foot spacing on a semi-acoustic plaster ceiling, which absorbs cafeteria noise.

All rooms that require well-regulated lighting are connected to a photo-electric control, which switches the lights on automatically when daylight in the room drops below a certain value. When natural light increases again lights are turned off automatically.

Proper quantity and quality of illumination are necessary in athletic units, just as in classrooms, but the seeing task is somewhat different. In the classroom lighting must be designed for the perception of detail. In the athletic areas detailed seeing is not usually required but players and spectators must see with greater speed and with accuracy. A sufficient

The athletic field is illuminated with eighty-four 18 inch floodlights.

Lighting equipment installed in the library, the cafeteria and a classroom.

quantity of light is, therefore, necessary because the speed of seeing is increased by the quantity of illumination.

Gymnasiums are equipped with totally enclosed direct luminaires to furnish efficient, well-diffused illumination that is easily maintained. This luminaire consists of a steel housing, inner aluminum reflector and dust-tight hinged cover with impact resisting glass. It is particularly well suited for gymnasium lighting because it will provide the proper quality of lighting and is rugged and easy to maintain.

In the gymnasium at Johnny Appleseed School thirty 500 watt direct units are installed 22 feet above the playing floor. White bowl lamps are used to minimize direct glare and illumination is from 18 to 20 foot candles. The ceiling of this gymnasium is painted buff, walls are buff glazed tile and the floor is light wood. Thus, light is reflected from floor and walls to illuminate the light colored ceiling and to prevent a harsh contrast between the light source and background.

The athletic field improvement includes a system of floodlighting for night football. Eighty-four 18 inch floodlights are mounted on six steel towers 65 feet above the ground. Three towers are located on each side of the field 60 feet from the playing field. Each tower has two rows of seven floodlights. The upper row has polished reflectors with clear lenses and a beam spread of 30 degrees. The lower row of floodlights also has polished reflectors but lenses are stippled, giving a beam spread of 63 degrees.

Each floodlight reflector is spun from aluminum and is especially treated to assure permanent high efficiency and to make cleaning easy. Lenses are heat-resisting and are mounted in hinged frames. A 1500 watt clear lamp is used in each floodlight and is operated at 10 per cent overvoltage. Overvoltage operation reduces the life of the lamp to about one third but light output is increased about 35 per cent with only a 16 per cent increase in wattage.

The power supply is a 2300/4000 volt three phase system which feeds oil switch controlled transformers in a vault under the stands. Safety switches are installed to close the secondary circuits to the lamps.

Is Intervisitation Valuable?

Junior High Teachers Vote "Yes"

CLARENCE E. BLUME
Principal, Phillips Junior High School, Minneapolis

INTERVISITATION and demonstration teaching have long been considered acceptable supervisory technics for the improvement of teachers both in training and in service. Recently, an effort was made to discover to what extent these technics were used in junior high schools and to obtain an evaluation of their use from both teachers and principals.

Six of the 12 junior high schools in the city in which the investigation was made participated. The principals were asked to select approximately half of the teachers from each department in such a manner as to include half of the teachers of their entire staffs. The questionnaire procedure was used in obtaining the data and returns were made by a total of 133 teachers and by five of the six principals.

In the opinion of the teachers, intervisitation is practiced more frequently between schools than it is within schools (table 1). Fifty-seven teachers, or 54.3 per cent of those replying to the question, reported that teachers visit instructors in other schools, as compared with 34 teachers, or 29.6 per cent, who stated that teachers visit one another within the building. The reports of the principals seem to indicate otherwise but this may be accounted for by the fact that teachers are replying from their personal experience while the principals answer from the viewpoint of the total program.

The inference may be drawn that, insofar as the teachers are concerned, there is no clearly defined policy of intervisitation as a part of the program of supervision of the school. This theory is further strengthened by the replies to the questions as to whether the principal selects the teachers to be visited; whether he informs the teachers that their classes will be visited; whether the teachers answering have been asked to make visits, or whether the principal requires a report of the visit if and when it is made. To these questions a total of 116 negative replies were made as against 19 affirmative. None of the questions was answered by any significant number of teachers, the highest frequency being 39 for item 4.

Both principals and teachers reported that when such visits were made they were for the purpose of observing special procedures or methods. However, 116 teachers, or 93.5 per cent, indicated that they would like to visit other teachers and 103, or 84.4 per cent, stated they were willing to have other teachers visit them. This would apparently indicate that some well-defined and well-organized plan for intervisitation would be acceptable to the teachers and might well be included in a broad program of supervision.

Teachers were asked what benefits they believed they had received from intervisitation. Although the returns could not be numerous because few teachers indicated they had visited other classes, the replies are presented as follows.

Benefits Received From Intervisitation

Replies	*Frequency of Mention*
Learned new methods and ideas	23
Gained inspiration	8
Could compare my work with that of others	8
Came in contact with new material	6
Observed other methods of class organization	4
Saw other courses of study	3
Very helpful	2
Saw how other teachers work	1
Helped me to get out of a rut	1
Watched other classes at work	1
Learned how to present certain units of work	1
Learned to provide for individual differences	1

Teachers were also invited to state why they objected to having other teachers visit them or why they did not object. The following is a partial list of the answers given by those who expressed no objection to the visits of other teachers.

Reasons for Not Objecting

Replies	*Frequency of Mention*
Exchange of ideas and projects valuable	19
Willing to help	6
Confidence in my ability	4
Doesn't bother me	2
Used to being visited	2
No objection if previously notified	2
Most teachers looking for help	2
Have learned much from others; would be glad to repay if I could	2

The teachers who objected to other teachers' visiting them gave the following major reasons.

Reasons for Objecting

Replies	*Frequency of Mention*
Teachers often critical	4
Strain on pupils and teacher	3
Depends upon visitor	3
Self-conscious	2
Fosters jealousies and ill feeling	2
Tendency to work for show	1

Teachers were also asked why they would like to visit other teachers. The following answers were given.

Reasons for Wishing to Visit

Replies	*Frequency of Mention*
To learn new methods	33
To get new ideas	30
To compare my work with others	13
For inspiration	12
To see how others solve same problems	4
To observe practices that should be adopted or avoided	3
To broaden viewpoint	2
To see one's self as others see one	2
To get better acquainted with fellow teachers	2
To learn	2
To broaden one's scope	2
To see how available material is used	2
To get out of one's own routine way	2

Table 1—Present Policies and Opinions on Intervisitation

Present Policies	Teachers		Principals	
	Yes	*No*	*Yes*	*No*
1. Do teachers in your school visit other teachers in your school?	34	81	4	1
2. Does the principal select the teachers who are to be visited?	6	26	3	2
3. Does the principal inform the one visited of the visit?	7	24	3	1
4. Have you been asked to visit a teacher in order to observe a special procedure or method?	6	33	4	0
5. Does the principal require a report of visits if and when made?	0	33	1	4
6. Do teachers in your school visit teachers in other schools?	57	48	2	1
7. Were such visits made to observe special procedures or methods?	33	9	3	0
8. Do you have any objections to being visited by other teachers?	19	103	1	3
9. Would you like to visit other teachers?	116	8	5	0

Table 2—Present Policies and Opinions on Demonstration Teaching

Present Policies	Teachers		Principals	
	Yes	*No*	*Yes*	*No*
1. Is demonstration teaching ever done in your building?	18	101	0	5
2. Is attendance at demonstrations required?	2	12	0	1
3. Are teachers informed beforehand what is to be demonstrated?	13	1	0	1
4. Do you have a fundamental objection to doing the demonstration teaching yourself?	50	65	2	3
5. Would you favor inaugurating a policy of demonstration teaching in your school?	38	74	1	3
6. If demonstrations are used in your building, is a discussion period held immediately following or later?	4	7	0	0
7. Do such discussion periods increase the values derived from demonstrations?	4	2	0	0

Worthy of note is the fact that of the 116 reasons actually given, including those mentioned only once, 63, or slightly more than half, are to "learn new methods" and to "get new ideas."

Of the eight teachers who did not care to visit other teachers, six gave their reasons. Because of the small number their answers follow just as they were received:

1. "Because I know from expressed opinions that very few like to be visited by a member teacher."

2. "I like inspirational talks and books better."

3. "Anybody can have a good class if he is 'primed' for it."

4. "Any demonstration I have ever seen seemed like so much 'show.' I wonder if one couldn't be told about technics that might be put into practice."

5. "Their methods probably couldn't be used in my class; it all depends on the personality of the teacher."

6. "I do not like it unless I have asked for permission from the teacher whose class I am going to visit."

Although 18 of the 119 teachers replying to the question "Is demonstration teaching ever done in your building?" replied in the affirmative, the principals unanimously answered in the negative. The number of teachers who indicated that they did not have a fundamental objection to doing demonstration teaching themselves constituted 56.5 per cent of those replying, while 74, or 66 per cent, were opposed to inaugurating a policy of demonstration teaching in their schools.

It is quite apparent that whatever merits demonstration teaching may have, it is not desired by the teachers or the principals in the junior high schools studied.

Teachers were quite emphatic about their desire to visit other teachers as is suggested by the fact that 93.5 per cent of the 124 teachers replying so stated. Apparently, they would be willing to cooperate in a plan of intervisitation inasmuch as 84.4 per cent stated that they had no objections to being visited by other teachers.

In an earlier study made on the senior high school level,* it was found that the large majority of teachers did not object to having other teachers visit them. The reasons submitted for wishing to visit other teachers indicated felt needs which they believed would be met by intervisitation.

Here is a supervisory technic that has been overlooked. It would seem highly desirable to inaugurate some carefully worked out plan that would afford teachers generally an opportunity to observe the approved practices of others. Such a plan could well be made to include not only methods of teaching but the organization of instructional units and materials, class management and methods and procedures in experimentation.

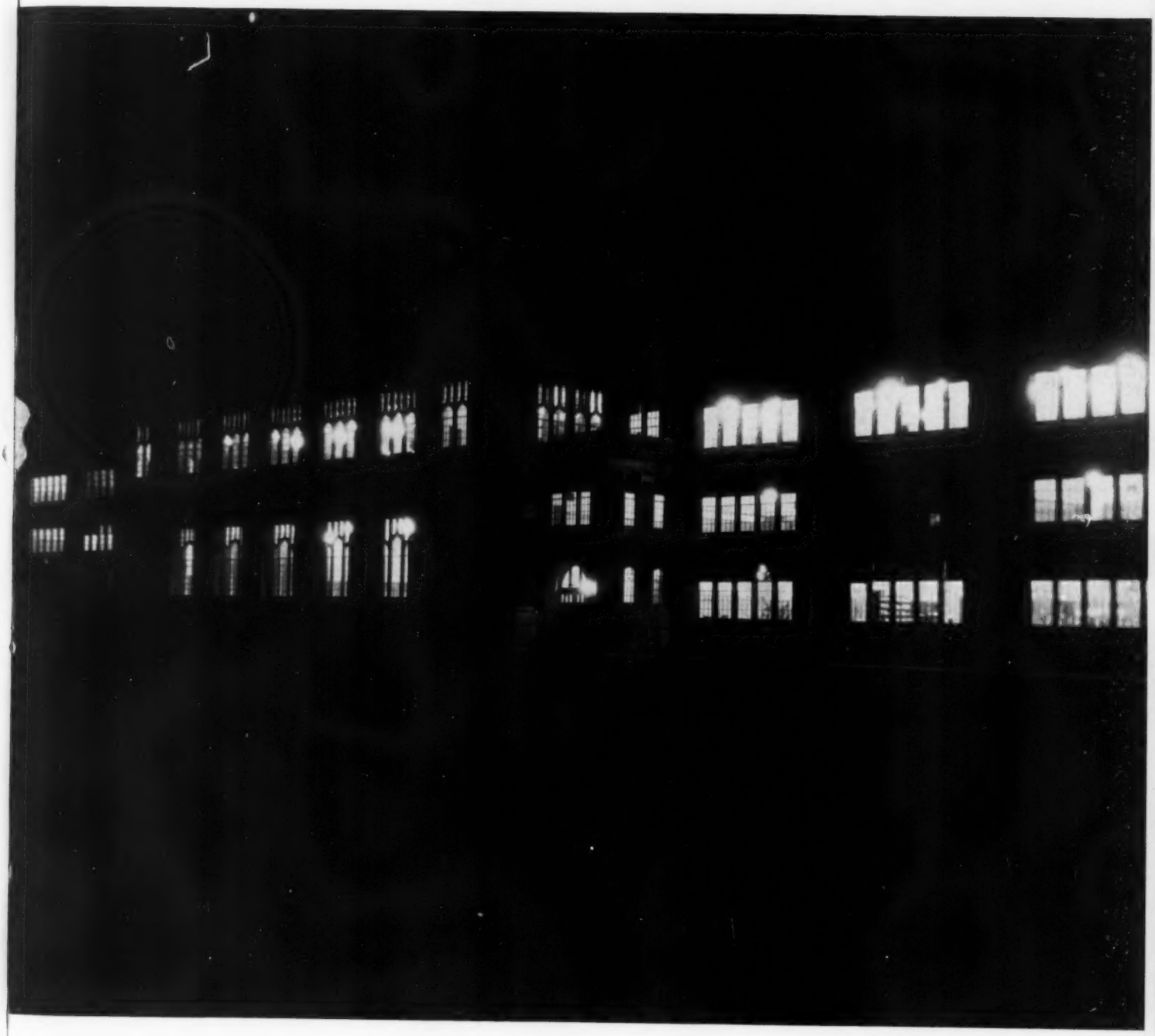
Problems present themselves for solution, however, before such a general policy can be adopted. The problem of making provision for the classes of the teacher released to visit in another building appears to be foremost. Unless this could be cared for within the building it would seem necessary to have substitutes available. The problem of finance would thus become a factor. In order that the visiting teacher might obtain the maximum benefit from time spent in intervisitation some centralized supervision, which, perhaps, could best be vested in the superintendent's office, should be established. From the standpoint of a broad program of supervision and of the improvement of teaching such a policy of intervisitation would seem to be highly desirable to meet the expressed needs of teachers.

Demonstration teaching, on the other hand, does not meet with the favor of teachers and principals and its inclusion in a supervisory program seems inadvisable.

In the study reported by Hughes and Melby, approximately a fifth of the teachers indicated that they had a fundamental objection to this procedure. This technic has frequently been used in elementary schools, especially where demonstration centers have been set up. The question of establishing such a center in a junior high school was not included in this investigation. However, there is a possibility that this type of supervisory technic, although it is effective in the elementary school, may not meet the needs of the junior high school instructors.

*Hughes and Melby, Supervision of Instruction in High School, Northwestern University, Contributions to Education, No. 4, Public School Publishing Co.

PORTFOLIO ON



ADULT EDUCATION

Adult Education in Review

LYMAN BRYSON
Teachers College, Columbia University

ADULT EDUCATION, in its major phases, is a little more than a century old. As a professional activity with training courses, organized groups of teachers and a literature of its own, it has been developing here for about fifteen years.

However, adult education as the deliberate effort of mature men and women to increase their information, their skills and their understanding of the world in which they live is as old as civilization. It is necessary to remember this when we speak of recent developments.

We have found new devices but our reasons for using them and the needs they meet are not new. The novel and compelling element in the present situation is that mobility, occupational shifts and bewildering political and social changes have made more people acutely aware of the need for self-education.

More than a decade has gone by since the publication of the first important summaries of the scientific evidence that age does not greatly hamper learning. In that time, we have increased rather than lessened our respect for the learning powers of the mature mind. It is evident now that age does not cause the loss of any important intrinsic power and that what were thought to be losses in power were really no more than losses in learning speed. When we have adjusted our methods to these later and much more favorable findings we can confidently plan for mature citizens who will adjust themselves flexibly to new situations.

It may fairly be said that neither the need nor the possibility is any longer in question. Administrators of private educational agencies compete with one another for chances to contribute to adult enlightenment. Administrators of public school systems and of state colleges and universities—even the federal government itself in agricultural extension—are all assuming permanent responsibilities for the quality and content of the cultural life of all sections of our people.

The special agencies that grew up during the beginnings of the depression, intended at first to help in the solution of unemployment problems, have lost their first character but have improved their educational values. They will pass, but good ideas and trained teachers will be salvaged. Public responsibility for adult education is now a generally accepted principle. An activity that enlists the time and deliberate effort of at least a

In its larger sense, adult education is "the diffusion of useful knowledge" and the creation of new knowledge by the efforts of all.

tenth of our adult population, and probably more than that, is not a luxury or a matter of private concern only.

Now that public authorities see their own rôle in adult education, a new set of problems and a new range of opportunities become evident. Adult education is only one phase of the much discussed community planning movement. But it is a phase that will count for a good deal.

Among the educators of adults are many who have had more experience in real community planning than have most of the executives of the various semipublic service agencies. Educators of adults are comparatively free of institutional jealousy and ambition because they have, by necessity, been working through many agencies and have seldom been in control of any.

It is often difficult for public school administrators, librarians, social workers and secretaries of this and that service agency to contemplate merging their work into some general community service. Educators of adults have long been thinking in community terms. They have even contributed notably to the solution of technical problems of community planning, such as the architectural problems that communities will face when they begin to make public buildings useful to the whole population instead of to minor children and public officials only.

These phases of growth are matched in interest by the recent developments in the use of new mediums of communication and in the growth of nonscholastic agencies.

The moving picture was fixed in its artistic intellectual and industrial patterns before the educators deigned to notice it. As a result, it is difficult now to make anything like full use of the cinema's immense possibilities. However, even here good work is being done. Cuttings are being used for the presentation of subjects to discussion groups and documentary films are being produced for this purpose and as direct tools of teaching.

The radio, fortunately, was taken seriously by the educators much earlier in its development. It offers the largest of all present audiences and many programs on the air prove how effectively it can be used to stimulate and to inform.

These new phases of adult education are merely mentioned but it is useful to mention them in a general review of the subject because they show us the points at which growth is now going on. They show, also, how many factors in our present American culture are, whether intentionally or not, important resources by which any mature person who now wants to educate himself can do so.

There must be constant preparation for the new problems that life offers at succeeding levels of personality development.

Our own civilization moves faster and changes more profoundly in its brief cycles than any other, probably, that history could show. In such a civilization it is reassuring to know that we have been wise enough also to create the means by which changes can be understood and by which a central spiritual stability can be maintained. This is adult education, in the larger meaning of the term. It is the "diffusion of useful knowledge" and the creation of new knowledge by the efforts of all the people.

Above: Students concentrate on problems in teacher training. Below: A merchandising discussion.

Public Forums for Defense

JOHN W. STUDEBAKER
United States Commissioner of Education

TODAY we are engaged in a great national effort to create a military and industrial organization capable not only of defending our hemisphere from actual invasion but capable also of providing aid in planes, ships, tanks and munitions of war to those nations that are resisting the totalitarian aggressors. In this effort there are many problems raised for our people. Some of the important and immediately pressing of these problems are:

1. What will be the effect of our expanding defense industries upon domestic economic life? Are we facing a new price spiral to be followed by a new and greater depression? If so, what can be done to cushion us against the effects of both?

2. What will be the effect of our expanding defense production upon the relationships of capital and labor? Should we outlaw strikes in defense industries? Should government "crack down" upon employers who refuse to observe the provisions of the labor relations and wage hour laws?

3. Can we work out a program of economic and cultural interchange with our South American neighbors? What sacrifice will such a program entail for various economic blocs in this nation?

4. How can we enhance our domestic security through equalization of opportunity, redistribution of income and provision of full employment without sacrificing internal strength and stirring up class conflicts?

5. What sort of world order should we work for at the peace table when the time comes? Can we avoid a repetition of the failures of Versailles? Can we achieve an international organization that will guarantee an enduring peace?

Concerning these and many other problems, it is imperative that we achieve a common understanding and agreement.

Many Americans today sense a possible conflict between democracy's freedom of discussion, its peaceful compromise of differences, its protection of minority opinion and an insistent need for national unity and morale. Some appear to be ready to short-cut the processes of democracy and self-government in the effort to achieve a forced unanimity.

Today's persistent dilemma may be stated thus: Can we achieve democracy's ends by abandoning, even temporarily, democratic means?

This question is made the more pressing because of widespread fear that our institutions, our form of government and our way of life are already being attacked from within by organized propaganda machines. The agents of disaffection are at work among us. It is not easy to distinguish between those who speak in honest criticism of our national shortcomings and those whose purpose is the weakening of democracy itself, whose carping criticisms are meant only to undermine our defense effort.

Democracy Connotes Freedom

Whatever else democracy connotes its central meaning is to be found in the idea of human freedom. The concept of freedom in its last analysis requires a belief in the ability of human persons to make choices and, by so doing, to influence events. The doctrine of freedom rests upon a belief in free will. Self-government means freedom to make collective choices, which are the sum of many personal choices.

The most elementary and persistent foe of democracy is to be found in ignorance and uncontrolled emotionalism. Democracy puts its trust in enlightenment, in knowledge and in good will. It requires a large degree of unselfishness in the citizen. Insofar as his individual choices may run counter to the choices of others compromise is required.

It is clear that if a democracy is to be defended and preserved it can neither permit its own destruction nor contemplate its own suicide. We are under the necessity, therefore, of reconciling freedom with authority, of compromising our differences in a larger loyalty to the creed of freedom and democracy, of providing for diversity within the framework of essential unity. A difficult business this, but one to which democracy is committed.

Our real problem is not how to obtain a specious unity by psychological manipulation and propaganda but, rather, how to obtain genuine unity by a process of willing compromise of differences after full and free discussion. The civil liberties of speech, press and assemblage are liberties preservative of all liberties.

How can the necessary enlightenment, good will and unity of purpose be achieved in the present emergency? Is it a mistake to believe that permitting everyone to speak his mind or to plead his cause, thereby multiplying special advocates and particular propagandas, will result in more enlightenment, more good will, more unity of purpose and of common action than will the abridgement of freedom of inquiry and of speech and the monopoly of propaganda by an authoritarian ministry of information?

The first line of our defense must be education—adult education—because the first attack is directed against the citadels of the heads and hearts of the people. The schools and colleges, press, radio, motion pictures, all the agencies of communication must be mobilized to make strong this first line of defense of the nation, the loyalty of the citizen that is based upon an understanding of the democratic values that we are defending. We are challenged to achieve by democratic means the end of efficient and united effort in the defense of our way of life.

We won our freedoms in the first place by organizing resistance to tyranny through town meetings. In an earlier and simpler civilization, lacking our modern means of rapid communication, our forebears met together for mutual counsel and

THE UNITED STATES IS ALREADY AT WAR ON THE MORAL AND SPIRITUAL FRONT AND MUST EFFECTIVELY COUNTER THE PROPAGANDA OF THE ENEMIES OF OUR SYSTEM OF GOVERNMENT

common action. They understood the meaning of the phrase "to provide for the COMMON defense" because in the face-to-face relationships of those town meetings they were united in a common policy born of free discussion.

Today the modern adaptation of the New England town meeting in the form of the public forum, the study group and the reading circle takes on a new and crucial importance. By using these educational instruments to enlighten their minds and to test their beliefs, Americans can once again achieve that philosophical agreement, that unity of motivation and of purpose that lies at the foundation of moral and spiritual preparedness in a democracy.

During the last decade the forum movement has spread rapidly throughout the country. Today it appears to be taking firm root as one of the major means of civic education. Beginning with the notable demonstration of adult education for civic literacy by the Des Moines Public Forums between 1933 and 1938 more and more school systems and other educational institutions have recognized their responsibility for the organization and management of this form of adult education.

In 1936, the Office of Education began to cooperate with the states and their local school systems in planning and organizing public forum demonstration centers. Short-term exhibit programs were operated between 1936 and 1939 in 540 communities in 38 states. In all of these forum demonstrations the management, selection of leaders and speakers, preparation of materials and determination of topics were left entirely in the hands of the local educational authorities, aided by citizens' advisory committees.

The results and procedures of these forum demonstrations were reported to the Office of Education and a knowledge of their successes and shortcomings spread abroad by means of published reports (see brief list of publications at end of this article). In addition, 36 state conferences were held in cooperation with state departments of education as a further means of promoting adult civic education and of giving guidance to the growing public forum movement.

In 1939, federal financial aid to demonstration forums was withdrawn. States and local communities continued to carry on, largely with their own resources. Field representatives, employed by state institutions with Federal Forum Project funds, made available the experience of the federal demonstration centers in more than 20 states.

Today we have at hand a body of successful experience in the organization and conduct of public affairs discussion, which must be still further put to work in citizenship training in the interests of national morale and unity. National defense calls for the further rapid extension of public discussion. Far from making for disunity and discord, the agreement that is born of a discussion of differences represents a new integration upon a higher level of intelligence and good will than can possibly result from propaganda appeals.

It is my belief that federal aid to the states for the organization and conduct of public forums under school auspices can be provided without federal control either of the subjects for discussion or of the personnel employed. It is my conviction that such a program would be one of our best guarantees of achieving in the United States that enlightenment, understanding and good will concerning our common problems that will help to make democracy strong both for the defeat of dictatorship and for the organization of world peace, which must follow victory.

Forum Planning Handbook. Bulletin 1939, No. 17.

Choosing Our Way. Bulletin 1937, Misc. No. 1.

Forums for Young People. Bulletin 1937 No. 25.

Printed Page and the Public Platform. Bulletin 1937, No. 27.

These materials can be obtained from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.

Results Tell

FREDERICK S. DeGALAN

Divisional Director
Evening and Summer Schools, Detroit

Students in an evening class in code in one of the Detroit public schools.

AS BETWEEN the schools conducted for our children and those devoted to adult education there are, of course, many points of difference. The most characteristic one, perhaps, is the motivation impelling enrollment and attendance. For the most part children attend school as a duty. Adults enroll as a privilege and attend with a clearly defined objective in view. They seek definitely a personal improvement in one respect or another.

To retain adult interest this improvement must be immediately apparent and it must show a steady growth. Adults know what they want of a school and to obtain it they are willing to make sacrifices and to endure inconvenience or downright hardship. If no compensating advantage is evident, their connection with the schools is quickly severed.

To attract and to hold the interests of adults, schoolmen must, therefore, set up objectives clearly; they must point all courses directly toward these objectives. And they must drive steadily and swiftly toward them.

These objectives of adult education fall into a few general fields. Adult schools in most American communities are organized to aid the foreign-born to adjust themselves to their American environment; to provide an opportunity for adults to continue academic training discontinued prematurely in youth; to serve those who desire to make vocational readjustments or who wish to add to their skill and knowledge in present employment and, thus, increase earning power; to help individuals acquire avocational skills; to develop cultural, social or recreational interests, and to improve health and physical fitness. Practically every activity under the head of adult education falls into one of these classifications.

Now anyone must grant that from earnest pursuit by an adult of any one of these objectives under expert leadership and with suitable equipment, personal improvement must inevitably result. These conditions are amply fulfilled in schools for adult education. The earnestness of adult students has been mentioned; their constancy is evidenced by a free-will attendance close to 75 per cent in most organizations; good leadership and equipment are the rule.

If our adult student is a satisfied customer he is usually eager to testify. Let us see what one can glean from a typical evening school periodical. All the articles are original and are the work of the adult students.

The first selection is a comment upon a loss of membership in a certain class for foreign-born women. "Instead of mourning their absence," says the spokesman, "we find cause to rejoice because they have taken higher classes or have moved to a better neighborhood."

An Italian man writes: "Yes, it is wonderful! Now that I go to night school, I learn to read and write the English language. I am proud of my teacher."

A Mexican workman speaks: "The evening school has helped me to speak, write and read. It has helped me in getting better jobs through my knowledge. It is one good way a working man may better himself."

An immigrant from Malta goes "all out": "When one says that evening school can help you change your destiny, he would not be exaggerating a bit. When I enrolled in class 1 I could hardly write 'yes' or 'no' and looked on the world with despise. Now that I can read and write I look at the world in a different way. Now I know that the world does not owe me a living, but I owe it my service and it is my duty to do my best, loyal and cheerfully, to pay for the benefits I am receiving. For this change I am indebted to the teachers of evening school."

A man from the land of Socrates and Isocrates: "This last fall I decided to go to night school. I had friend who had attended and had learned easily. I know if I came every night I could learn. In just these four months I read and write quite well. I tell my friends not to wait as I did."

A student from Sweden says with humor: "Since I commenced evening school I can now say that I have a superiority complex, thanks to the ambitious teachers. I am anticipating also to increase my financial condition. I also received my citizenship papers, so this resourceful country is now mine."

the Story

There is no age limit on learning. Pupils in evening classes range in age from 18 to 70. This class in English for the foreign-born is held at the Custer School in Detroit. There can be little doubt of their interest and eagerness to learn the language of their adopted country.

Some colored pupils, most of them lately from the South, testify to betterment.

One woman says: "I have always wanted to go to school and now that I have the opportunity I am enjoying it very much. I am forming new contacts, new habits and getting new ideas. My husband is pleased to have me come each evening."

Another: "Night school is wonderful to me, for when I was small I did not get a chance to go to school like the other children. My father and mother died and I, being the eldest, had to go to work and help care for the other children. I now can work and go to school at the same time."

An old lady writes, not without a simple eloquence: "How generous was the one to whom this thought had come to impart to others such a wonderful deed as to establish an evening school—that he felt their need and thought of a way to help them. Whose name shall we engrave for such a wonderful thought!"

Now a mother has this to tell: "In our class we have women from Russia, Italy, Poland, Lithuania, Bulgaria and Ukraine. There was everything strange to me before I went to school. Now I can understand my children talking English to me. My children can't talk my language to me. That makes me go to school. It is very kind of school people and teachers to be good to foreigners."

Does anyone doubt that there is personal improvement here or improvement of home or improvement of the nation? And, possibly, some rehabilitation of the teacher as well?

For not among the least valuable by-products of adult education is the effect of the impact of adults upon the teachers' experience. A large percentage of teachers engaged in adult work are, or have recently been, contract teachers in the day schools. The contrasts encountered inevitably broaden the teacher immeasurably. Adult students offer a constant challenge to the teacher. She is faced by mature people as old or older than she, often of a native intelligence equal to hers and often with a background of experience with life and fate that renders hers insignificant by comparison.

The authoritarian attitude must give way to the democratic one with attention given to the students' individual point of view, to their opinions and convictions. Since attendance is upon a purely voluntary basis the teacher can hold the students only through alertness to racial, political, religious and educational differences and biases of many kinds.

Another by-product of the contact of adults with the schools is the improvement in the attitude of these people toward the public schools by reason of their closer acquaintance with the schools. It is a parent-teacher situation that is a "natural."

Examples of improvement and rehabilitation need not be confined to the Americanization or to the elementary field. Let us examine three pages of an evening high school publication. They carry portraits of 76 members of an evening high school graduating class, 23 women and 53 men, with ages from 17 to 40 years, all upstanding, enterprising Americans.

The achievement of their high school graduate status is the result of from one to nine years' faithful attendance at night school after days of labor in office or shop. Some started from scratch and some complemented day school work, which they had been forced to interrupt in youth. From this goal of evening high school graduation many went on to take evening college courses.

Adult education really does things for people.

Program for Sports

CHARLES B. PARK
Superintendent of Schools, Mount Pleasant, Mich.

ADULT recreation, stressing physical activities, has taken a prominent place in many community-wide programs in America during recent years. Today, we find that many adults are including time for physical games in their daily and weekly leisure-time schedules.

A recent spot survey indicates that Michigan communities of all sizes are concerned about recreation programs for children and adults. This survey included 16 typical Michigan communities of varying sizes. All are providing a recreation program of some kind while 13 of the group include some adult games. Fifteen of the 16 towns operate a full year program, while one operates for children alone and only in the summer.

Eleven communities employ a paid director while five manage to get along with volunteer leadership.

In the matter of planning and supervising the program, one town has no planning committee; three programs are under the supervision of the local board of education; one is controlled by the city government; two programs are planned by a community coordinating council, and nine are planned by a community recreation committee representative of such local agencies as the board of education, city government and service clubs.

Wide Range of Sports

There appears to be a wide range of physical activities included in the towns surveyed. A small community, for instance, may provide only one or two simple sports, such as quoits and croquet, while another community may offer baseball, softball, tennis, swimming, shuffleboard, pingpong, badminton, skating, skiing, basketball, volleyball, hockey, bowling and square dancing.

In Mount Pleasant, Mich., a college town of 8500 population, a complete program of adult recreation has been developed during recent years. At first the program was not coordinated and various groups created their own forms of recreation. The city government then took a hand and with the help of the W.P.A. created a city-wide program for children and gave some assistance to various adult activities, such as softball, skating and swimming.

Two years ago the city commission created a city recreation committee and gave it power to reorganize the local recreation program completely. The local board of education joined with the city at this time and agreed to assume a portion of the cost of the new program. The recreation committee represented the board of education, the local college, the service clubs, women's interests and the city government.

All-Year Program Planned

The committee first made a complete survey of available resources and of prevailing recreational interests and needs on both youth and adult levels. With the help of this information a year round program was drafted to include all ages and all major interest activities. The activities survey included the opinions of several thousand children and adults.

The recreation committee was given the authority to employ a director and any additional staff that would be needed to supplement local W.P.A. leadership.

Since Mount Pleasant does not have a recreation center it became necessary to utilize all of the usable buildings and play areas available in the city. The board of education opened its four schools and allowed the use of its play areas for the program; the academy and college training school did the same, and the city provided a large park, which includes a modern swimming pool, a baseball diamond, two softball diamonds and a number of concrete tennis courts. Community cooperation thus solved the housing problem and decentralized activities to the extent that a greater total participation resulted.

A number of locally enrolled college students, who were majoring in physical education, were employed as leaders in the program for the summer. A plan of preenrollment of children and adults in activities helped to give advance information as to how large the groups in various centers would be and facilitated schedule making to a considerable degree.

Adult participation during the first summer of the program was extremely gratifying. Several hundred men and women participated in the softball competition while thousands enjoyed watching the night games. Tennis was played by a large number of persons nearly a hundred of whom took part in the summer tournament. Swimming was one of the most popular activities. Baseball, although not as popular as softball, drew many younger adults. Quoits and croquet were participated in by small groups and the courts were in use most of the day.

Throughout a ten week period of activity there were 115,788 participants in the recreational program at the various centers. The total included adults and children. At the city park, where most adult activities were staged, 59,799 persons participated during the ten week summer period. These totals are based on a daily count and include repeat participations.

Coordinated Plan a Success

The first summer under the coordinated plan was such a success that the city commission and the board of education immediately decided to extend its plan of supervised recreation throughout the whole year. As a result, a full-time recreational director was employed and a year round program was prepared by the recreation committee. The plan included physical education activities, hobby activities, arts and crafts and miscellaneous events for all ages.

Among its nonphysical activities Mount Pleasant now lists an up-and-coming gas motored model airplane club for adults, a photography club and a wide range of adult education classes.

Hobbies for Everyone

"Twelfth Night" presented by the Milwaukee Players. Students, working men and women, business and professional people for more than nine years have presented a festival of Shakespearean plays under the auspices of the Department of Municipal Recreation and Adult Education of the public school system of Milwaukee.

MARION PREECE

Recreation Supervisor, Department of Municipal Recreation and Adult Education, Milwaukee

"HE'S what they call a Satin Burger and a very rare breed," said Mr. Bildig of his pet bird in a recent story by Frank Condon. "Peewee takes about all my spare time. I guess you'd call it a hobby."

In return for all the time that Mr. Bildig devoted to him, Peewee did remarkable things for Mr. Bildig. He filled his leisure time with delight and made him content to bear a humdrum work life. When one is tied to a desk day in and day out it is well to have an outside interest, even though it is only a little blackbird with a baleful eye.

A hobby does not necessarily have to be something disassociated from one's work. A satisfying hobby may be just a continuation of the activities of work-time into play-time.

One of the Chicago park field houses has a well-equipped lapidary under the supervision of a capable teacher; it is open several evenings every week to amateur lapidarists. The shop is always crowded with people busy chipping off the rough edges of stones, cutting and polishing them.

Two evenings a week a lapidarist, who works at his craft in a downtown establishment, comes to the field house where he lets his creative ability run riot in designs for settings of stones he has gathered from all over the world. In his work box are little bags containing emeralds, sapphires, jade and coral. Part of the evening he works on his own stones and metals; part of the time he serves as a volunteer assistant to the busy instructor, and all of the time he is an inspiration to the enthusiastic tyros about him.

Many people have hobbies connected with homemaking: collecting old silver, glass and furniture; weaving; rug making, and even making furniture. Two men who had become interested in early American furniture through a course their wives had taken at a Milwaukee social center heard by chance of a truck load of cherry wood that they were able to buy for a song. That was two years ago. They have made cupboards, chests of drawers and lovely tables that are replicas of museum pieces. There is a large supply of wood left and they have plans enough for the future to keep them occupied for a long time.

Cooking, one of the oldest of all home arts, is a hobby with artists and writers like Tony Sarg and Christopher Morley and prize fighters like Jack Dempsey, who are members of the Society of Amateur Chefs. A New York paper in its "Living and Leisure" column reported that the managers of a chain of lunchrooms, wanting to attract a really sophisticated clientele, hit upon the plan of

opening an additional room where this sophisticated clientele could cook its own food. They had no idea that so many people would respond. One man even appeared with a large moist fish which he was finally dissuaded from cooking.

Schools are, of necessity, assuming more and more responsibilities for training students in leisure-time activities and interesting them in hobbies that will carry over into after-school life.

Only within recent years have we begun to appreciate the inherent educational possibilities in hobbies, for both young and old. The possible contribution of hobbies in vocational guidance is becoming more and more evident as the difficulty of finding suitable occupations increases. For many young people hobbies are supplying much needed work experience and firsthand contact with real life problems.

By the less formal methods of teaching conservation, schools have created a fresh interest in nature hobbies. Fine city, state and national parks have added new zest by providing facilities for outdoor living and for encouraging seasonal sports as hobbies.

The recent youth hostel movement, which makes it possible for people to hike and cycle inexpensively from one region to another, has opened an exciting hobby of travel and adventure that is growing by leaps and bounds.

Night schools, numerous private agencies that sponsor leisure-time activities, museums, libraries and recreation departments offer unlimited opportunities for finding and pursuing hobbies.

The "lighted school houses" that are the social centers of the department of municipal recreation and adult education of the Milwaukee public schools offer a range of hobbies that includes metal work, woodwork, leather tooling, weaving, needlecraft, photography, sketching, painting, radio, aeronautics, astronomy, gardening, woodcraft, chess, contract bridge, ballroom dancing, folk and square dancing, the modern dance, orchestra, bands, choruses, costume and scene designing and play production. Read the list of club activities, the athletic department's announcements of 20 sports and games or read the schedules of forums, discussions and book reviews.

Who are the people engaged in these hobbies? Housewives, students, men and women of the professions, of business, of factories and stores.

A chain of local stores in Milwaukee made a survey of the hobbies of its employes. They found that some men make boats and canoes or models of famous ships. Others raise everything from flowers to wild ducks. There are amateur photographers by the dozen in these stores, many of them specializing in definite fields. Several have motion picture cameras and one makes sound records to accompany the pictures he takes.

Diving, ski jumping, trap shooting and fly casting are also listed. Music, art, drama and radio broadcasting come in for their share of attention. There are collectors of stamps, water color paintings, ceramics, travel folders, cactus plants and early editions of the Bible.

How do people find their hobbies? There are almost as many ways of acquiring them as there are hobbies. How did Mr. Bildig come into possession of Peewee? Mr. Condon does not say. And there is another important thing about Mr. Bildig and his hobby that Mr. Condon does not mention. But if you read the story carefully you will discover that never once is it recorded that Peewee was introduced into the conversation by Mr. Bildig. A very good point to remember.

Left: Boat building is a profitable hobby for the fisherman, hunter and nature lover. Below: Another popular hobby is the art of weaving. These two enthusiasts are working at Lapham Park Social Center in Milwaukee.

Women's chorus (group of "Mothersingers") in Gorham, Me. The image over the piano is not a patron saint but the reflection of a photographer.

Music for All

MRS. FRANCIS L. BAILEY
Principal, State Normal School, Gorham, Me.

ALTHOUGH there is a tremendous amount of music activity in the country, it is not equitably distributed and the lack of it is most severe in rural areas. The commonest handicaps or deterrents to music activity, found by Dr. Willem van de Wall in a six months' study of music in adult and community life, are: lack of leaders with adequate musical education and social vision and lack of available music and instruments. With more far-reaching provision for music education in rural schools, there should be more music activity in adult enterprises in rural life.

For several years, however, it has been a matter for concern that not only in rural areas but even in urban centers where music training in the public schools is abundant and of the best a noticeable cessation of music activity takes place following graduation from school. Music educators have discussed ways and means of effecting the vital "carry-over" into adult life. "Pre-adult" education in music should be such a basic preparation for cultural and social satisfactions that the capacity to avail oneself of the resources of music will be self-actuating and self-perpetuating. Where is such preparation to be found in America today?

Many colleges and even a great many secondary schools offer courses in choral and orchestral conducting, in addition to the general preparatory music courses.

Worth-while conferences and institutes for leadership training are often arranged by state extension services and have proved to be of sufficient practical help and inspiration to warrant further repetition. A system of advisory visits, such as has been in effect in England in the past, would be even more helpful.

Probably the best work in the field of after-school development of music leadership is done by the field specialists of the National Recreation Association, which has held institutes in amateur music leadership and which gives further help through its music information bureau.

An excellent demonstration of the adult music educator in action was presented in Vermont a half dozen years ago. The need for music leadership in the state had bcome so acute that when the legislature refused to grant an appropriation for the employment of a state music supervisor the state board of education appointed a music committee to investigate other possible means of raising the standards of music in the schools. It was recognized that improvement of music in the schools was indissolubly united with the interest and activities of the communities and that the goal of satisfying music in adult life was, conversely, dependent upon good music in the schools. As a first constructive measure in meeting the common needs of community and school, the board sponsored a state music project directed by Augustus D. Zanzig of the National Recreation Association.

In the space of three weeks, Mr. Zanzig carried out a crowded schedule of lectures, demonstrations and discussions at state and county conventions, in conferences, community meetings, churches, colleges, schools and homes.

The result of all these important contacts was a gratifying stimulation of interest and music activity of many kinds; an increasingly cordial attitude toward music in the schools, and a host of happy experiences that were the point of departure for a strengthened program of school and community music.

Vermont has no tax-supported program of adult education. Citizens took matters into their own hands more than a dozen years ago when they made a three year study of all phases of living in their state.

As one of many outgrowths of this self-survey, a state council of adult education was set up which, for almost a decade, has conducted a program that, in the words of Mary Jean Simpson, dean of women of the University of Vermont, is aimed "to work with other organizations instead of competing with them, to develop volunteer leadership and to try always to find out what people need and want before giving the approval of the council to any specific adult educational project or undertaking."

While much informal music-making goes on in homes, churches and small groups in Vermont, there are

The office of Paul Pelton, supervisor of the Vermont music project of the W.P.A., who administers the Carnegie music library. Music, records and books are lent to the general public. Circulation has increased steadily since the library was installed until it reached a total of 46,930 in 1940.

several formally organized programs sponsored by state-wide agencies. The bureau of cooperative extension work in agriculture and economics brings helps in singing, playing, folk-dancing and games to rural communities. The Vermont State Symphony Orchestra Association offers experienced players opportunity to play in the state symphony orchestra, now in its fifth year, while to less experienced players it offers training in several "little symphony" units.

Preparation and presentation of an annual concert by the Vermont State Choral Society, sometimes in collaboration with the state symphony, is the work of the music department of the state federation of women's clubs, which has also sponsored annual contests in composition. The Vermont music project of the W.P.A. is rated one of the best in the United States.

In 1938, the committee on music in adult life, with the aid of the social studies department of Bennington College, made a careful study of the music conditions in Vermont. It was found that the musical progress of activities that had already been undertaken was heavily impeded by the insufficient musicianship of those who wished to take part and that music for homes, churches and community chorus groups suffered, and was often completely blocked, by the lack of trained leaders and the unavailability of music and instruments. The committee concentrates its efforts on these two points.

As helps in leadership problems, the music divisions of the annual adult education conferences have been turned into two day workshops for choir and chorus directors. These are conducted by the head of the music department of the college at which the conference is held, assisted by student music groups. Such conferences have proved beneficial both in practical help and in sociological values.

For some years, summer music courses of a week's duration have been held at Fletcher Farm, an adult education center in Proctorsville. The institutes of the last three years have been devoted entirely to leadership training for music lovers, especially teachers of choral groups. The committee on music in adult life has sponsored these courses.

Classes are small enough to allow for ample attention to the needs of each member. Singing groups in the vicinity volunteer their services for demonstration and experiment. Such workshop study has proved to be an effective type of training and needs only to be multiplied in kind to be more far-reaching in influence. Meanwhile, music training in Vermont's colleges is developing in character and in scope and must remain the real wellspring to which Vermont must look for leaders.

A much broader base of attack has been the work of bringing music into homes, churches and schools. A fine collection of records, scores and books donated by the Carnegie Corporation is housed and administered at the University of Vermont for the use of the students of the university and the three state normal schools. Well-equipped music libraries are an important factor in the music programs of other Vermont colleges.

No more valuable help to music life could have been given than the Carnegie Corporation's grant to the Vermont Council on Adult Education in 1939 of funds sufficient to purchase the nucleus of a state lending library of music, records and books for the use of the general public. Since the public library commission was unable to house and administer the library, the help of the Vermont music project of the W.P.A. was enlisted. The library is housed in the office of Paul Pelton, state supervisor of the music project, who, with his staff, ably handles the detailed work of distribution.

Some contributions of music, books and records have been received, but the supply of choir music, in particular, and of music and records for individual or group appreciation study is insufficient to meet the demand. It is hoped that state support will be forthcoming for the enlargement and upkeep of the library, with funds adequate to ensure its administration in the event of the suspension of the federal music project.

The boundless significance of music in people's hearts blazes with new importance in times of stress. To preserve balance it is necessary to cling to things that endure over and against all disruptive forces. The program of national defense—and defense of all democracy—that is now under way relies in large measure on the constructive contribution that music can make.

Public Learns of Education

ALONZO G. GRACE

State Commissioner of Education, Connecticut

THE adult education program of Connecticut includes the well-known pattern ordinarily associated with the public school enterprise. It includes also the varieties of effort associated with programs generally. There is, however, an additional type of effort that will prove of the utmost consequence in understanding the problems of public education and the problems of democratic living.

This program consists of the following: (1) the development of a state and five regional citizens' councils; (2) the formulation of a state and five regional educational planning committees; (3) the utilization of the interest and talent of organizations to make evaluations and studies; (4) the development of courses for members of school boards, and (5) the development of courses for certain employed personnel.

Citizens' Councils.—Misconceptions frequently arise in our communities concerning the purposes and goals of education. New methods and new technics are developed and become part of the school program. Resistance develops in the community because parents have not been informed and citizens generally have not been permitted to learn about these changes.

While citizens are not experts in the field of education, with the guidance and leadership of educators and with a willingness on the part of both citizens and educators to render unbiased, intelligent and constructive judgment on fundamental problems, progress may be made.

In order to study common problems in our state, the state was divided into five regions in which a citizens' committee, composed of at least one representative from each town, was formed. Representatives are selected by various organizations or because of the statesmanship and leadership of the individual in the community.

From the citizens' councils the problems as the citizens visualize them are tabulated at the beginning of the year and are then transmitted to the educational planning committee where subcommittees proceed to gather the basic facts by regions.

The reports are discussed first by the five regional subcommittees, then by the educational planning committee and ultimately and finally by the citizens' councils. After review by the citizens' councils, joint committees representing all regions consider the report before transmittal to the state committee and, thence, to the boards of education or the state board of education.

The state citizens' council meets approximately four times a year to discuss final reports and to indicate or suggest procedures for the regional councils.

Committees on Instruction.—To aid in research and to act as an advisory committee on instruction, a state committee on instruction and five regional committees have been formed in the same manner as the citizens' council.

In each region there is a planning committee composed of representatives from all levels of the educational system—elementary, secondary, higher, adult, specialists in mental hygiene, social workers, librarians and others. Specific problems are studied by subcommittees. More than a thousand teachers, principals, superintendents and others associated with the educational enterprise have served on committees during the last two years.

Organized Civic Groups.—The state department of education has encouraged cooperative research and planning. For example, the League of Women Voters accepted the responsibility for a study of rural supervision in the state. The educational committees of the league not only reviewed the problem statistically but more than 300 members visited 100 schools in the state interviewing board members, teachers, pupils and citizens of the community to ascertain the needs, the effectiveness and the cost of the present program. The league's report has proved to be a major aid in the development of this phase of the program and in promoting a better understanding of the functions of supervision.

The American Association of University Women has undertaken the responsibility for a comprehensive study of boards of education. Its report is near the point of publica-

Training in retail selling. Photograph from Utah Education Department.

Students learn fine points of advertising layout in St. Louis evening school.

tion. Not only was the composition of boards surveyed but also the work of boards, rules and regulations and many aspects of the policy-determining function of the local board were studied. Out of this report will come a discussion of the report and recommendations for the improvement of our boards of education, a problem discussed throughout the state.

Similarly, the parent-teacher association of the state has cooperated in the study of teacher education. Industry and labor have aided immeasurably in the study of certain aspects of vocational education. In the study of commercial education in the secondary school, such organizations as the National Office Managers' Association, chambers of commerce and others have participated.

Courses for School Board Members.—Two experimental courses for school board members were conducted last year. One in the eastern part of the state in which 12 boards of education representing 12 towns met on 10 successive Monday nights to discuss the elementary school, redirecting the high school program, vocational education, guidance, transportation, budget making and business management.

In another area in a metropolitan region where problems are different to some extent, state boards of education met for six successive Tuesday nights to discuss fundamental problems. One of the great benefits of these meetings was the exchange of opinion that took place among the members representing different communities. At the request of the members of the participating groups, a manual for school board members has been prepared. This will become the basis for the development of courses throughout the state during the ensuing year.

Courses for Employed Personnel.—Another aspect of the problem is the matter of the in-service training of certain employed personnel. A specific effort this past year has been devoted to experimental courses in janitor or custodial training. In one city, a course for 25 janitors has been developed by the supervisor in charge of the force.

In certain rural areas, where only one or two men may be employed in a school, a program has been developed where an expert sits down with the janitor, appraises his efforts and indicates to him the strength and weaknesses of his work. A report, which is discussed with the person, is transmitted to the school board for its information.

To carry out a program such as this the state department of education must be organized on a democratic basis. The state department of Connecticut consists of two major divisions, the division of instruction and the division of administration, with a division of research and planning and a liaison to the attorney general's office attached to the commissioner's office. All divisions affecting administrative policy are determined by the administrative council, composed of representatives from every part of the organization. All decisions concerned with supervision or the improvement of instruction are presented and approved by the supervisory council. These bodies meet weekly.

The state board of education is composed of outstanding men and women who are willing to devote untold hours to the study of educational problems. Board meetings are devoted almost exclusively to the discussion of fundamental educational problems and the establishment of sound policy.

Our problems will not be solved by adding constantly to the educational program. Because of this procedure in the past, our secondary school program resembles a sort of cafeteria offering. We have now reached a point at which we must determine how much and what schooling are essential for the preservation of the democratic order. We must determine, too, how much government is essential; how much overlapping and duplication of governmental services are possible in a democratic order; how much we can pay for, and how best we may use our existing social agencies.

Have we the courage to face the situation realistically and in the interests of the children, youth and adults of a state? The task is not simple.

A step at a time is infinitely better than no step at all. A public that is left completely uninformed or misinformed about any part of a program is a public that cannot aid in the perfection of the enterprise. Educators too frequently conceive of adult education in terms of credits, certificate courses, so many hours per week, so many different types of activities, but the real adult enterprise is procedure along the lines indicated. Our progress may not be great; our procedures are not perfect, but it is adult education in the fullest sense of the word.

The University's Contribution

CHARLES FISHER
Director of Extension, University of Michigan

IN RECENT years universities have been brought face to face with a challenge that may prove to be equal to any that has ever faced institutions of higher learning.

The time has passed when a university can stand in glacial grandeur aloof from the common ways of man, teaching and ministering to a chosen and privileged few; it must now become a part of the community in which it lives and seek to make its facilities more generally available to adults. The administration of a far-reaching adult education program is entirely consistent with high standards of scholarship.

Some of our universities have gone a long way toward meeting insistent demands from tens of thousands of men and women who are troubled by a world topsy-turvy during the last twenty-five years. Following is a brief review of some of the more important services that are being rendered.

1. **Training Teachers and Leaders for Adult Classes.** Columbia University, New York University, the University of California, the University of North Carolina and the University of Michigan, among others, have realized the need for professional training for workers in the field of adult education. They have attempted to meet this need through regular credit and noncredit courses in adult education by developing correspondence courses and by offering workshop courses.

2. **Preparation of Materials for Use in Adult Classes.** The University of Chicago and New York University, especially, have prepared instructional pamphlets and bulletins on various subjects for use in adult classes. The University of Chicago, with the aid of the educational section of the W.P.A., has prepared pamphlets at the adult elementary level. Present demands are for study material in a more usable form.

The bureau of government of the University of Michigan, for example, has attempted, without sacrificing scholarship, to make its publications dealing with specific problems in state and local government, particularly in the fields of taxation and finance, more readable and useful to the general public.

3. **Extension Class Instruction.** The rapid development of late afternoon and evening credit and noncredit courses for employed adults is especially characteristic of urban universities, such as Washington University, Wayne University, University of Pittsburgh and University of Denver.

Washington University, for example, has a complete program of adult education under the supervision of a dean whose responsibility it is to make university classes available to the adults of the community. Many state universities have established urban centers if the university is located outside of the metropolitan area.

4. **Credit and Noncredit Programs of Correspondence Instruction.** While correspondence courses have been offered for more than fifty years by some of our leading universities, this work has greatly expanded during the last ten years. Universities that previously had not entered the field have done so under the pressure of public demand. The W.P.A. education division, through its program of offering courses for out-of-school people under university sponsorship, has stimulated this growth in several states. One such project at the University of Michigan enrolled nearly 5000 students in the third year of its operation.

5. **Use of Radio.** An increasing number of universities that have their own radio stations and others using free time from commercial stations have been rendering educational service to the listening public. Such programs as the University of Chicago Round Table enjoy a national audience on important public problems. Some universities and colleges use the radio principally as a public relations agency, while others think of it entirely in terms of its educational function. Universities are finding it difficult, if not impossible, to compete with commercial stations. However, when university stations are used as a means of disseminating knowledge rather than of dispensing entertainment, they operate within a legitimate field.

6. **Visual Education.** University distribution of visual aids, such as slides, film strips and motion pictures, both silent and sound, has increased greatly in the last five years. Nearly all state universities and many private institutions of learning maintain rapidly growing libraries of educational motion pictures that are available for a small rental charge to schools and adult groups. Some state universities have thousands of such films on hand.

7. **Short Courses or Institutes.** Short courses or institutes have attained a wide popularity in many colleges and universities. These meetings run from one day to two or three weeks and, for the most part, make use of the local faculty as instructors. Short courses bring to the campus such widely divergent groups as insurance men, retail dealers, municipal employes, farmers, leaders and presidents of parent-teacher associations and women's clubs, industrial foremen, business executives and ministers.

The number attending varies from small conferences of 50 to 15,000 or 20,000 in the case of Farmers' Week held at the various land grant colleges. While the instruction in these classes is informal and no credit is granted, such meetings have done much to raise the general level of knowledge and understanding among those attending.

8. **Postgraduate Education.** Graduates of professional schools, including doctors, lawyers, dentists and engineers, have for years realized the necessity of keeping abreast of new developments in their professions. Refresher courses for profes-

sional people originated with the physicians and have come to include all the professional groups.

The postgraduate development represents one of the most virile movements in adult education today; it has unrealized potentialities for the advancement of learning upon levels at which it will become immediately available to leading citizens.

9. **Library Extension Service.** This type of service originated through the extension divisions of state universities, particularly in the Middle West, to further the study of public questions in localities in which adequate library service was not otherwise available. Pamphlet material on current problems and books are sent out without charge to individuals, study groups, clubs, forums and granges, to be used not only for independent study but for groups as well.

In addition to pamphlet and book material, programs, study outlines and reading lists prepared by specialists on the various university faculties are made available. This type of service was among the first to be inaugurated by universities in their extension work and has become particularly valuable in the development of classes in adult education, correspondence study and in the follow-up of radio and institute work.

Flexibility Is Essential

BURTON K. FARNSWORTH

Director of Secondary and Adult Education, Department of Public Instruction, Utah

SECONDARY EDUCATION, as it has come down to this generation, has several serious limitations, which act as snubbers to more desirable educational advancement. Adult education, therefore, using as it does many of the secondary school facilities, must be eternally vigilant to avoid channeling itself into the same limitations.

For present purposes the following commonly met features are merely described as illustrative.

1. The teaching is done inside large bare rooms, "secluded cloisters" withdrawn from the "teeming world."

2. Whether classes are small or large, the procedure is to teach the group as a group.

3. The rooms are filled with row on row of single cast-iron desks of uniform size. (Implications here are many but cannot be analyzed in this paper.)

4. To whisper, to cooperate, to work together, to help one another are taboo.

5. Groups meet, listen and pass on from room to room in regimental order; equal periods are assigned for learning a song or making a house.

6. Groups are organized into grades and move from grade to grade toward graduation.

7. Grades, credits, promotions and graduation are the too common goals rather than "effective citizenship, fuller life, scholarly attitudes."

8. Uniform assignments are handed down from teacher to group. Assignments are to be prepared out of class. Within the class the pupils sit placid, while teachers "pour on" formal and remote bits of erudition.

A remarkably short time ago the current attitude among adults toward regularly organized adult schools was one of suspicion. Catch phrases such as the following reflect a codification of the commonly accepted point of view:

"Oh, I'm too old to learn."

"You can't teach an old dog new tricks."

"He's an old fossil."

"Youth is plastic, age is static."

Within the present generation many things have happened to promote the extension of adult education. Probably one of the most significant in encouraging older people has been Thorndike's "Adult Learning." Other books have come from the press at a most fortunate time to have positive influence on schools for adults. The lengthening span of life within the last generation, the shortening of periods of labor, unemployment among large groups that have eagerly sought release and an appropriate way to use their time, all are factors that have greatly influenced adult education.

It seems strange, at first thought, that this new adult program, (1) which is not bound by a long background of tradition, (2) which does not need to bow to college domination or entrance requirements, (3) which has no particular need of formal examinations, marks, credits or promotions, (4) which does not need to have a set number of minutes in its period arrangement, (5) which, in fine, does not have to conform to any of the limitations the secondary schools have inherited, has to a remarkable extent fitted into the same kind of pattern that marks the secondary school. Perhaps the most likely reason is that we "put new wine in old bottles" because we have the old bottles.

Analytical studies of adult school ventures point to hopeful possibilities for the future. The relationship of teacher to group taught is rather that of a group with its own chosen and accepted leader. The content of material is selected cooperatively by the members of the group and the leader rather than given as a hand-me-down authoritarian dogma. The lecture method is being replaced by various types of committee presentation followed by entire group participation. The number and frequency of meetings and the length of the class period are remarkably flexible.

The library, the theater, the museum, the church, the factory, the hillside, the community, the farm are the acceptable schoolrooms. Source material, printed and otherwise, is gathered and used as it contributes to the purposes of the class.

The extracurriculums are so absorbed and integrated with the curriculums that they are one. There are no extracurricular activities in adult schools.

Whether the adult school is in a remote village or in a metropolitan city, the general principles are the same. Those responsible for the program must be ever on the alert to keep the new schools unfettered and free to answer the needs of those for whom they are established, unanchored to the formal schoolroom, set class periods, formalized lectures and hand-me-down pedagogy.

Teachers Need Responsibility

When They Get It They Grow

CHARLES E. GREENE
Superintendent of Schools, Denver

IF THE teacher is to be independent and resourceful in planning and acting, he must be held responsible not only for custodial care, accurate record keeping and covering the course of study, or even for seeing to it that his pupils meet the highest standards of achievement as shown by objective tests, but also for all the education that pupils may be expected to obtain through the instrumentality of the school.

To accept this principle requires a long step beyond present accepted practice for in the present school organization the principal is held responsible for everything but pupil accounting and meeting subject-matter standards. To be sure, many teachers on their own initiative, or urged on by principals, do concern themselves with the whole education of the whole child but such concern is not encouraged by our school organization.

One person, even though he is a high school principal, cannot be held responsible for the growth and development of a thousand or more adolescent boys and girls. If teachers are to assume this responsibility, they must be held accountable individually, not in a group.

The school system as a machine was perfected many years ago. In the rehabilitation of the schools in the decade between 1920 and 1930, the idea of the school as a machine rigidly directed from the central office was abandoned. A new program was adopted that had for its chief objective the stimulation and growth of the teacher. This was to be achieved by means of the following methods:

1. A study of a philosophy of education that stressed freedom for teachers and pupils.
2. The adoption of a salary schedule that attracted the best teachers.
3. A course of study prepared and written by teachers.
4. Construction of modern buildings, addition of needed equipment and establishment of professional and classroom libraries.

In our program of extensive teacher activity in Denver in the last twenty years we have made several discoveries.

1. Teachers are superior to administrators in the ability to teach, to plan for pupil activity, to improve organization and content in the classroom and to develop all the minutiae of classroom procedure.
2. Only teachers, as contrasted with principals, assistant principals and deans, have the time and the opportunity to study individual needs of all pupils. This statement may be interpreted to mean that only teachers are prepared to carry on continuous guidance.
3. Parents are interested in teachers, not in administrators.
4. When the curriculum is modified to meet the evident needs of boys and girls, the administration of the school is affected and, generally, only the teachers are familiar with the details of the situation. Unless administrators have given close attention to the work of the classroom, and few administrators in large schools have time for this, they are not well enough informed to plan the administrative program necessary to provide for pupil needs. Experience has shown that teachers planning cooperatively are able to evolve the administrative practices necessary.

In the light of these discoveries, the following conclusions seem reasonable:

1. Teachers should be held responsible for the curriculum of their own classes, and the course of study should be developed on the spot where it is to be put into practice. This does not mean that each teacher alone should be a law unto himself or that he should, without assistance, attempt to go his own way in planning his program. Most teachers would be unable to do this and would shrink from it. In fact, one of the greatest obstacles to the plan proposed here is that teachers themselves shun taking responsibility because of timidity, inertia or lack of purpose and interest. Teachers need to pool their resources both for the stimulation they receive by so doing and for the benefit of children for whom they are planning.

Teachers require encouragement from administrative officers. They need assistance from curriculum specialists. In fact, we cannot expect teachers to take their rightful places of leadership until teaching conditions are such as to dispel all the fear and worries that haunt the teacher in the traditional public school. This means security and ease of mind as regards tenure of position; salaries worthy of a professional career; prestige in the school and community, and responsibility in making decisions.

2. Teachers should be held responsible for the guidance of the pupils they teach; for the management of boys and girls, and for their growth and development. A teacher should be assigned a small group of pupils who remain with him for the entire period of their work in school. At the end of the period the responsible teacher should be expected to prepare a complete statement about each pupil that will constitute the final recommendation of the school.

I have small faith in any plan for pupil guidance that provides for one set of teachers in charge of subject matter and another in charge of counseling. In a study of subject failures in five senior high schools made nine years ago, I found that

Mr. Greene urges that teachers be held responsible for (1) the curriculums of their own classes; (2) the guidance of their pupils and their growth and development, and (3) making contacts and cooperating with the parents

no principal, assistant principal, dean, counselor or homeroom teacher knew the intimate facts about individual pupils who were failing to do their work. But I did find several teachers who knew. This was true because teachers associate with boys and girls day after day and, therefore, really have an opportunity to know them.

There is no such thing as mass education, only the education of individuals. There is social education, but this goes on only through the interplay of friendly personalities cooperatively seeking common or related goals. We learned a long time ago that the teacher isolated with a group of pupils in the elementary school was likely to get poor results. Now, I hope, we have learned that the mechanical high school departmental system confuses rather than educates.

We need to preserve both the guidance opportunities and the responsibility that the traditional elementary teacher has and we need also to enrich the program for both pupil and teacher by cooperative planning, which can multiply the resourcefulness of a single teacher manyfold and give direction and relatedness to a departmental program.

3. The teacher should assume responsibility for meeting the parents of the children under his instruction, and with their cooperation he should help pupils round out their educational programs in the neighborhood and community.

Parents Ultimately Responsible

Parents are, in the end, held responsible for the education of their own children and they can delegate only a part of this responsibility to the school. They should know, therefore, what is being delegated to the schools and why. The only answer to this problem is a continuous and close relationship among the parents, teachers and pupils concerned.

With the casual and accidental relationships that we now find between parents and teachers, it is a wonder that more conflicts do not arise. The peace is kept chiefly by the careful and cooperative planning of the boys and girls themselves, who seek their own ends in spite of teachers and parents.

To make possible a school program that places upon teachers responsibility for the curriculum, the growth and development of pupils and for the maintenance of cooperative relations with parents requires changes in administrative organization. The school must first be decentralized.

Certain key teachers must assume full responsibility for the boys and girls whom they teach. These key teachers may have the pupils concerned in one or more classes a day, but the minimum should be one class a day during the time the pupils are in a given school. The principal should relinquish his responsibilities for these boys and girls to the key teachers who take over this heavy task.

If we could stop here, the organization would be easy, but the school can be decentralized only in part. There should be teachers of general education, or core work, to map out a program of cooperative planning with teachers of such subjects as Latin and mathematics, physical education and home economics.

Reorganization Takes Time

One of the most important guiding principles in working out such a program is that the development of every new administrative procedure takes time. If high schools are to be organized as suggested, administrators must make the reorganization easy and they must see to it that the teacher has time for curriculum work, guidance activities and cooperative planning with teachers and parents.

The busiest person in such a reorganization is the administrator. He must stimulate teachers who are indifferent; encourage the timid; deal with the jealous; organize the new pupil-parent-teacher relation; keep the public informed; in many instances increase the school budget, and manipulate the development of a schedule of classes that looks impossible on the face of it. The principal can no longer be a plant foreman. He now becomes a social and educational engineer.

What has all this to do with teacher education? This is teacher education. That individual develops most who assumes responsibility for something that tries his utmost capabilities. Without such responsibility teachers are immature, not full-grown human beings. But when a teacher stakes his success on learning the real needs of boys and girls and on meeting those needs, that teacher will grow if he has time enough to do the job and if other conditions are favorable.

We who are engaged in the education of youth should be able to frame a program of teacher education. We know from experience that growth of the individual cannot be guaranteed through the acquisition of any particular set of skills or type of information or by any procedure the results of which are attested by objective evidence. One cannot stimulate growth in every instance by playing upon the emotions in some specified fashion. The individual grows only when he is placed on his mettle to use all his faculties and all his resources.

Authority Stimulates Growth

To withhold authority and responsibility from teachers prevents growth and there is no substitute one can offer a teacher to take the place of responsibility. The teacher who is petted and favored is only spoiled. Using kindness and good manners alone in dealing with teachers savors of the era of benevolent autocracy in the schools and cannot take the place of responsibility.

One of the most important steps in teacher education is a careful analysis and revamping of the administrative structure, particularly of the high school. The present organization cannot be junked because both teachers and the public are used to it. But it can be modified: in some ways simplified and in some ways made more involved. It should be simplified to make teachers more responsible and made more involved to provide time and place for cooperative planning, to allow for individual freedom of both pupils and teachers and to meet all sorts of individual needs as they arise.

The administrative changes alone will guarantee us nothing in progress or in teacher growth. On the other hand, no new plan or experiment is likely to be made of permanent value until administrative changes make it easy instead of inconvenient and difficult.

The purpose of administration is to make good learning conditions easy. So far, high school administration has fallen far short of meeting this purpose. It should be more carefully planned in the future.

Report Cards That Tell the Story

RALPH M. GANTZ

Superintendent
Mifflin Township Schools
Franklin County, Ohio

A PUPIL'S school report should deal in detail with his reaction to school life. It should be comprehensive and accurate. It should offer definite recommendations for improving not only his scholarship but his progress in character building and in facilitating adjustments to his social problems. He must be reported upon as an integral being, as an individual, in relation to his past and present social, academic and moral status.

The traditional report made the attempt to rate a pupil's achievement in a subject-matter field by an A, B, C, D and F rating, or even on a percentage basis. This was determined by the cumulative marks from a grade book with, possibly, a weighted grade from a term examination.

More often than not, though, it represented a teacher's spasmodic judgment at grading time a few hours ahead of the deadline when grades had to be turned in. Along with the other 200 or more marks made out for pupils by each teacher it received inadequate consideration and could be considered reliable only from a personal point of view. Such reliability might be highly efficient and, again, it might be grossly in error.

Sensing the need for more reliable reporting, the faculty of Mifflin High School, Franklin County, Ohio, set itself to the task of devising a report that would partially fulfill the obligations of its reporting philosophy. The accompanying report shows the present stage of this development. It is divided into four parts.

Type of Work Done. This section is broken down into the contributing factors that play a part in determining the type of work a pupil produces. For the sake of brevity and clarity the following factors were selected:

1. Contributions: Discussions and comments upon related matter; making use of the subject matter to apply to life situations.

2. Recitation: The degree of accurate knowledge of the work assigned.

3. Preparation: The thoroughness of achievement.

4. Participation: The frequency of recitation; amount of reaction.

5. Accuracy: The ability to do and say the right thing at the right time.

6. Aggressiveness: The willingness and drive exhibited in the group.

A teacher weighs each of these factors on an A, B, C, D and E basis and the average value equals the

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Pupil Report Developed at Mifflin Township Schools

"A report should stimulate activity on the part of the pupil, the home and the school. It becomes the medium of a better understanding among these three parties. Its possibilities for pupil growth are as great as the teacher's initiative and the parent's interest."

Report of_____ Date_____

Teacher_____ Subject_____

MEANING OF THE MARK

A—Excellent
B—Good
C—Average
D—Poor
E—Conditional
F—Unsatisfactory

A—TYPE OF WORK DONE

____1. Contributions
____2. Recitation
____3. Preparation
____4. Participation
____5. Accuracy
____6. Aggressiveness

B—GENERAL ATTITUDES OBSERVED

These items marked with a check ( ) are called to your special attention. If a zero (0) precedes the trait, the opposite is true. Examples: An "0" before cooperative means uncooperative, before ambitious means lazy, before courteous means discourteous.

____1. Cooperative
____2. Ambitious
____3. Leadership
____4. Courteous
____5. Responsible
____6. Originality
____7. Efficient
____8. Questioning
____9. Helpfulness
____10. Aggressiveness
____11. Unbiased

C—SOME CAUSES OF THE ABOVE ATTITUDES

____1. Works hard
____2. Considerate
____3. Neat
____4. Plans well
____5. Has initiative
____6. Good judgment
____7. Practical
____8. Attentive
____9. Enthusiastic
____10. Adaptable
____11. Confident
____12. Friendly
____13. Accurate
____14. Respectful
____15. Trustworthy
____16. Tries

D—RECOMMENDATIONS

____1. Wider reading
____2. Home study
____3. Outside activities
____4. More responsibilties
____5. More rest
____6. Medical attention
____7. Parent-teacher conference
____8. Better attendance

TO THE PUPIL: This report must be returned to the teacher issuing it. You are scheduled for a teacher conference on_____

TO THE PARENT: Use the reverse side of this sheet to state your reaction to the report and the outcome of your conference with the pupil. Please check and sign:

____1. I find the report entirely satisfactory.
____2. I have discussed the report thoroughly with the pupil.
____3. My comments are on the back of the sheet.
____4. I should like to talk this over with you.

(Signed)_____
Parent

"Every American pupil has the right to a well-rounded education that will enable him to live happily and successfully with his fellows."

Ralph M. Gantz, Superintendent
Mifflin Township Schools

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pupil's mark for the period. Such a mark in a subject-matter field has ample justification from a qualitative respect. In further support of the weighting done, the teacher submits a note of summary to the right of the column of weighted factors. The pupil and the parent are thus enlightened as to the dim and mysterious ways by which a mark is attained.

General Attitudes Observed. This section helps to achieve consistency on the part of the reporting teacher and at the same time invariably shows a consistency in the whole pattern of the pupil's school life and achievement. It helps the teacher to substantiate her judgment in section A by reliable observation, careful analysis and intelligent evaluation of the factors in section B, for these traits have their counterpart in section A.

For example: If the character traits: "ambitious," "efficient" and "helpfulness" are checked, it is reasonable to expect "aggressiveness" in section A to be given an "A" or "B" rating. Or, if "aggressiveness" is rated a "D," than it would be reasonable to expect these traits to be preceded by "0." Thus, a degree of consistency is achieved that must be apparent to both the pupil and those who are concerned with his progress. For further light on this section, the teacher makes a summary to the right of the traits marked. This may be a general statement or it may be specific and detailed information relative to those traits marked.

The completeness of the report gives a parent a clear and logical explanation of the type of work done by the pupil. It forms an adequate justification for the reliability and validity of a mark. To stop here would be to miss the real opportunity inherent in a modern reporting system. A report must not only reflect the pupil's progress or lack of progress accurately, but it should also analyze the why and how of this situation. With this in mind, the third part of the report was included.

Causes of Foregoing Attitudes. Here the teacher has the opportunity to give her version of why the pupil is developing as he is. Again, there must be a general consistency in the traits checked. Following the example given in the previous section, it would be reasonable to expect that a pupil who shows attitudes of ambition, efficiency and helpfulness might do so because: he is considerate, plans his work well, is enthusiastic, friendly and accurate. These qualities appear in section C. Space is provided to the right of these qualities for the teacher to make further comment on reasons for attitudes. Such remarks are most important when a trait is preceded by an "0."

This section brings attention to bear on the pupil's conduct, attitudes, enthusiasms and ways of thinking. Needless to say, the teacher, before venturing into the sphere of analysis, must give serious consideration to the behavior pattern and thought processes of the pupil on whom she is reporting. This may and should entail personal contact with the pupil in other mediums than the class and laboratory periods.

In our school, this section of the report card entails conference periods with the teacher at least once during each reporting period. The teacher must seek every opportunity to become a part of every phase of the pupil's school living. This brings a conscious relationship of guidance between the teacher and all of her pupils. It has the effect of creating within the pupil the feeling of responsibility for his every act in school. It is not that he is being checked and spied upon but, rather, that he becomes aware that interested and sympathetic attention is being expended upon him to aid him in becoming the personality of his dreams, of achieving reality in a development program.

An outgrowth of such critical analysis should become as concrete as possible. For this reason, the final and last part of this report is included.

Recommendations. Space is provided for a few terse and well-directed statements. As an outgrowth of section B these recommendations incorporate a mutual aim for pupil and teacher alike. These two groups must be in agreement on all of the statements made here through consultation and reflective consideration.

Such a scheme of reporting may sound well on paper but how will it work out in a practical situation? What are the reactions of parents, teachers and pupils?

These questions could be answered in one way only and that was by putting the new reporting procedure into operation. This was done two years ago in a rural high school of some 300 pupils. After the report had been published three times over a period of twenty-four weeks, a survey was made among the teachers making the reports, among the pupils reported upon and among the parents of these children. Similar questions were put to each of these groups with the purpose of making comparisons of reactions and cross-checking the reliability of the responses.

Ninety-three parents, 266 pupils and the staff of 12 teachers submitted their reactions. The responses were tabulated and reduced to percentages for the purpose of comparison. Five essential elements of any educational program, *i.e.* scholarship, responsibility, interest, activity and guidance, were selected as bases of comparison and the responses from teachers, parents and pupils were listed as follows:

Scholarship. Fifty per cent of the teachers say that their class standards have been more nearly approached. Forty-two per cent say that pupils show a greater degree of reflectiveness than formerly.

Among the parents 87 per cent report that they are able to discuss the pupil's achievements more intelligently through the use of the new reports. Eighty-six per cent are putting greater stress on the pupil's development in scholarship because of the reports. Sixty-one per cent say that the pupil has done more studying at home.

When it comes to the pupils themselves, 55 per cent received better grades under the new plan than they received the previous year.

Responsibility. Ninety-two per cent of the teachers make a more thorough analysis of pupil contribution than formerly. Forty-two per cent say that pupils are more willing to assume their school responsibilities. Half of them declare that pupils show a better spirit of cooperation. Eight per cent note an increased desire among pupils to be of service to other pupils. A third of them find that pupils are acquiring a greater interest and sense of responsibility in carrying out their own plan of work.

Parents to the extent of 76 per cent have been brought closer to the school; 70 per cent, closer to the teacher; 83 per cent, closer to the child. An attempt to comply with the recommendations offered is made by 96 per cent of those reporting. Eighty per cent note a faster rate of development of traits listed.

Of the pupils 80 per cent try harder to improve the quality of their work because of what may be said in the report and 85 per cent consciously try to improve themselves in the various traits listed.

Interest. The teachers' replies are as follows: 75 per cent are noticing a greater spontaneity in class recitations; 33 per cent realize that more pupils are working beyond requirements; 46 per cent say that pupils show added interest in completing projects, assignments and reports; 54 per cent are aware of the greater interest being manifested in material presented by others, and 83 per cent find a more wholesome attitude of questioning on the part of the pupil.

The parents replied as follows: 86 per cent appreciate knowing more of the school life of the child through the reports and 84 per cent say that the child is showing more interest in his school work through the attempt to show a better record.

Sixty-four per cent of the pupils enjoy their school work more than previously, they declare.

Activity. The new reports stimulate activity, 83 per cent of the teachers believe.

When it comes to parental reactions, 81 per cent spend more time discussing the report with the pupil than formerly; 89 per cent say that the child is making more than the usual effort to better himself in those characteristics marked; 79 per cent say that he is showing this development in increased cooperation and pleasantness in the home.

The pupils' reactions are as follows: 71 per cent are studying more than they did the previous year; 79 per cent are doing more home study; 75 per cent say that the parents bring more pressure upon them to get down to work; 71 per cent attempt to recite more than formerly because of the favorable comments that may appear on the report; 80 per cent are better able to conduct themselves because of what is said on the report.

Guidance. Half of the teachers do more pupil counseling now; 91 per cent feel that pupils show development in traits that have been brought to their attention.

The parents react as follows: 90 per cent understand the report; 79 per cent do a better job of counseling with the pupil; 79 per cent say that the pupil discusses his school problems at home more than formerly; 74 per cent say that he is more willing to discuss his school problems now.

The pupils' point of view is summarized thus: 79 per cent say that parents take more time to discuss the new report than they did the old report; 80 per cent say that the reports give a clear picture of their accomplishments; 85 per cent indicate that the reports help them analyze their difficulties; 34 per cent discuss their work more now with their teachers; 53 per cent discuss their work more now with other pupils.

Schools have steadily grown away from the public during recent years. If we are to maintain that close, vital and necessary relationship between the school and its public we must adopt procedures and methods that will compensate for the losses sustained through increases in the size of schools, through our streamlined living and through the other factors of our modern life that have so effectively widened the gap between the school and society.

Army Air Corps Learns Spanish

SPANISH for practical purposes is now being taught to the 10,000 officers of the Army Air Corps at almost all of the posts and fields where Air Corps officials are stationed, including Puerto Rico and Hawaii. Instructors are provided by the Work Projects Administration.

The object is to provide Air Corps officers with a conversational use of the language and with some knowledge of vocabulary in the technical and practical fields with which these men are in daily contact.

In addition to being an important gesture of good will toward Latin America, it is a valuable practical measure. A speaking and writing knowledge of Spanish will enable officers to carry out their duties more efficiently and to enter into the life and culture of the South American countries more intimately.

The classes held in Washington, D. C., are used, in part, for experimental purposes and they serve as a guide in selecting and developing materials and teaching technics.

The project is designed to provide Air Corps officers with the ability to converse in an understanding manner in Spanish and to give them a practical vocabulary keyed to aviation, government, Air Corps and general civilian procedures.

Preliminary lessons developed for this purpose include the Spanish essential to meeting the emergency of a forced landing. Finding directions in towns; reading signs, memorandums and orders; the location of governmental, commercial and industrial agencies; passport regulations, and social identification are some of the topics covered.

Obtaining food and shelter, the facts of money exchange, national characteristics and customs relating to the search for necessities are covered by another group of lessons. Instruction is also given covering situations that arise in case of accidents in the line of duty and also problems of orientation and integration with the customs of the people with whom officers come in contact when they are on leave.

The lessons develop progressively in scope and subject matter, taking up more specialized vocabulary as facility with the language is attained. Aviation terminology, the language of various occupations related both to Air Corps activities and to civilian pursuits, the vocabulary of color and camouflage, Army life and such specialized fields as radio and telephone communications are also covered.

At the posts where classes are in operation, each teacher averages four classes daily and each class contains an average of 15 men. The classes are purposely kept small to give as much individual attention as is possible. Classes are one hour long and are held five days a week.

Visual Aids to Character

LAWRENCE R. WINCHELL
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IN a discussion of the use of visual aids as a method in character education it would seem necessary to define what we mean by character and how it develops. In his book, "How To Be Happy Though Human," Beran Wolfe gives us a typical contemporary psychological definition when he states: "Character and personality are the sum total of all the tools, instruments, devices, habits, responses, emotions and feelings which an individual utilizes for the attainment of his goal in life."

If we agree with this dynamic concept of personality, which is synonymous with character, then the strategic aim of education would seem to be to set up worth-while goals in the mind of the growing child. These goals should be those that will bring the greatest happiness and benefit to the individual and to the society in which he lives.

Character Molded by Example

It is a well-known fact that character and the behavior of an individual are molded more by example than by precept. Children are natural imitators and will usually adopt those measures to gain their ends that they have seen employed by adults or by other children with whom they have come in contact. It is in the process of imitation that the sense of sight and the powers of observation are the main avenues through which the child receives his impressions, whether they are good or bad.

In the early years of childhood the part that pictures play in the life of the child is greater than most people realize. Attitudes of kindness toward animals and social adjustment with other children are aided immensely by the animal pictures of infancy, the fairy stories and pictures of the preschool child, the great moral pictures of Sunday School and classroom and the portrayal of incidents in the lives of the great men and women of history that are found in elementary textbooks.

That it is extremely important that the child come in contact with pictures of a high order is evident when we realize that the impressions received through the sense of sight are more intense than those received through any other sense. We say, "in one ear and out the other," but we do not say, "in one eye and out the other"!

That pictures are of great value in teaching certain forms of knowledge is not now questioned. On the contrary, it is approved and practiced. Coleridge would sometimes say, after looking at a picture: "There is no use stopping at this, for I see the painter had no idea. It is mere technical drawing."

Herein lies the whole reason for pictures as a part of character-building equipment. The picture must have an idea that is good, sound and understandable to the child. He must react emotionally to the emotion that inspired the artist to create it. Educational psychology teaches that the emotional attitudes etch impressions on the mind more deeply than does anything else. Thus, pictures that arouse wholesome emotions and positive attitudes in the child are of inestimable value.

Adolescents Need Visual Aid

In the preceding paragraphs I have dealt principally with the influence of visual aids on the preadolescent child because it is during these years that the personality of the child is most plastic. This does not imply, however, that the visual material with which the adolescent boy and girl come in contact is not extremely important also. During this period the individual's scope is broadened. It is an age of seeking for freedom and is usually characterized by a form of rebellion against the parental yoke.

The boy and girl of teen age come in contact with both good and bad visual material. Today it is impossible to shield children from the morbid and the repugnant and to present them with only the good and beautiful. In metropolitan areas, particularly, they have access to magazines, periodicals, newspapers and books ranging all the way from sordid "gutter literature" with its degrading illustrations to such definitely uplifting material as collections of great masterpieces of art.

Youth will, no doubt, in the normal course of events become acquainted with them all, for this is part of the education of experience. Through these experiences he will make comparisons and if we, as educators, have done a good job, he will select the good in art and literature and reject the bad.

Influence of Movies

During the age of adolescence, perhaps, no other pictorial influence is as great as the motion picture. The romantic productions encourage the patronage of youths at a time when they are interested in romance. The interest in sex is dominant, and in the realm of the motion picture lies one of the greatest challenges to society in molding the character of its young people. The moving picture may influence adolescents to great things or it may lead them to the antisocial behavior of the gangster, which, unfortunately, it has sometimes done by depicting underworld characters in a heroic light. The teaching values of a picture of the "Abraham Lincoln" type as contrasted with the recent "Scarface" are immediately apparent to the educator.

A great deal of censorship and watchful scrutiny of film production is necessary on the part of society if this valuable visual aid is to be used to the best advantage.

The popular enthusiasm with which such magazines as *Life* and similar pictorials have been received by the American public again stresses the appeal that pictures have for young and old alike. The sense of frankness and openness with which all topics of current interest are discussed and portrayed is, in my mind, a healthful sign, and a picture that depicts life as it is and not as we would like to have it is sound, practical education.

Bicycling Made Safe

A. J. MOOG

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Safety patrol boys inspect a bicycle during registration period.

THE last four or five year period has brought an enormous upswing in the use of the bicycle. According to statistics furnished by Cycle Trades of America, Incorporated, there are approximately nine million bicycles in use today, a ratio of 1 to 3½ automobiles and 1 to 15 persons. About 75 per cent of the last ten years' production of bicycles has been put on the roads and streets within the last five years. This vast and sudden increase, plus the great number of motor cars in use today, has created a major traffic and safety problem.

Police departments and safety committees everywhere have become greatly concerned with the problem. How to get boys and girls of a reckless age level to cooperate in the prevention of accidents resulting from the improper use of a bicycle has caused meditative wrinkles on many an adult brow.

The mere passing of ordinances prescribing the responsibilities of bicycle riders or requiring the registration of such vehicles does not bring the desired results. Children do not read that kind of literature anyway. The problem, as is the case with so many other problems, seems to beckon to the school for solution.

An appeal must be made to pupils to get them interested in the matter on their own level. Pupils must be made to feel that there is a problem and that they have a part to play in its solution. To create this situation boys and girls must be allowed to participate in such activities as bicycle inspection, setting up rules and regulations, organizing bicycle clubs and patrolling certain areas where the problem is most acute. The more experienced should be allowed to give younger and less experienced children information and aid in keeping their bicycles in good repair and efficient working order.

It was with that concept in mind that the teachers and administrators of Eveleth Junior High School, Eveleth, Minn., set up machinery for remedying one of the community's most vexing situations. This work was begun in the spring of 1939 and has been carried on to date. It was felt from the start that the cooperation of the local police and recreation departments would be highly desirable inasmuch as they were to have an important part in the program. Little effort was required to enlist the solid support of these departments. The student council, the adviser groups, the school paper and the safety patrol, all were brought into action to give publicity to the undertaking and to execute the details.

The central feature of the program is a campaign that lasts several weeks and is timed to get under way just as the last vestige of snow is disappearing from the streets and boys and girls are becoming tremendously interested in the bicycle again after having been deprived of its use during the long winter months. It is then that an appeal can most effectively be made to oil up, clean up, fix up and light up that bicycle. Directions and details concerning

Adviser room demonstration of care and handling of a bicycle.

the campaign go out simultaneously to the adviser groups, the student council, the safety patrol, the school paper, the local police department and the city recreation department. Thus, the various activities planned are understood by all and can be more fully integrated. Posters are placed in the corridors and adviser rooms. Special literature is put out on the library tables.

The adviser room activities consist of discussions and reports based on an outline entitled "The Safe Bicyclist"; a demonstration by an older boy who understands the mechanics of the machine; reading and discussion of the local bicycle ordinance, and a bicycle safety test. Each pupil is given an appropriate bookmark containing safety rules and a mimeographed diagram of a bicycle, copied, with permission, from a printed sample furnished by the Illinois division of highways.

The bookmarks in themselves are a fine safety patrol project. The diagram makes it easy to follow the demonstrator as he explains with the use of a new and perfectly equipped bicycle how to make minor repairs and adjustments, such as tightening the chain, balancing the wheels, adjusting the handle bars and seat; how to oil and grease the bicycle, and what is required regarding lights and reflectors.

To provide added interest and prestige, arrangements are made for the school superintendent, the chief of police, the principal and the school safety committee chairman to visit the adviser rooms during the period of the campaign. At the close of the campaign a bicycle test is given to all pupils. The results of this test are analyzed and summarized by a class in safety practices and are made available to the adviser groups for review.

The local city ordinance provides that before a license is granted to a bicyclist he must pass certain tests and have his vehicle inspected to ensure the use of safety equipment. This entails a considerable amount of time and work. Hence, when the police department was approached with an offer to do this work through the safety patrol under police direction, the request was willingly granted. As a result, members of the safety patrol are assigned to assist in this activity at certain hours of the day during the registration period.

After a thorough checkup the patrol boys fill out a bicycle inspection card indicating the condition of the bicycle and safety equipment. If, in the judgment of the safety patrol and the adviser, the applicant has met all the requirements, he is given a sticker showing that he has passed all tests. Upon presentation of this sticker and inspection card at police headquarters he is granted a license, subject, of course, to payment of the registration fee. The sticker is then put on the rear fender to serve as a reminder of an obligation to himself and others.

It is easy to see why the law enforcement officials are enthusiastic about the plan and are glad to cooperate. It is also easy to see how such a procedure, almost entirely executed by the pupils, produces a desirable reaction to the whole problem. In addition to furthering safety, the plan also provides valuable training in other phases of citizenship.

BICYCLE INSPECTION CARD
EVELETH JUNIOR HIGH SCHOOL
Date _____

BICYCLE OWNER
Name _____
Address _____
License Number _____ Year _____
Make of Bicycle _____ Ser. No. _____

Required:	Good	Poor
1. Passing Brakes		
2. Size of frame in comparison to rider		
3. Seat adjustment		
4. Condition of chain		
5. Rear reflector or light		
6. Handle bar grips		
7. Spokes (broken or loose)		
8. Tire valves		
9. Air pressure		
10. Head light		
11. Horn		
12. Pedal treads (worn)		
13. Adjustment of:		
(a) wheel bearings		
(b) fork bearings		
14. Lubrication of:		
(a) wheel bearings		
(b) sprocket bearings		
(c) Pedal & Fork bearings		
15. Riding test:		
(a) Figure eight test		
(b) Parallel line test		

EXAMINER _____

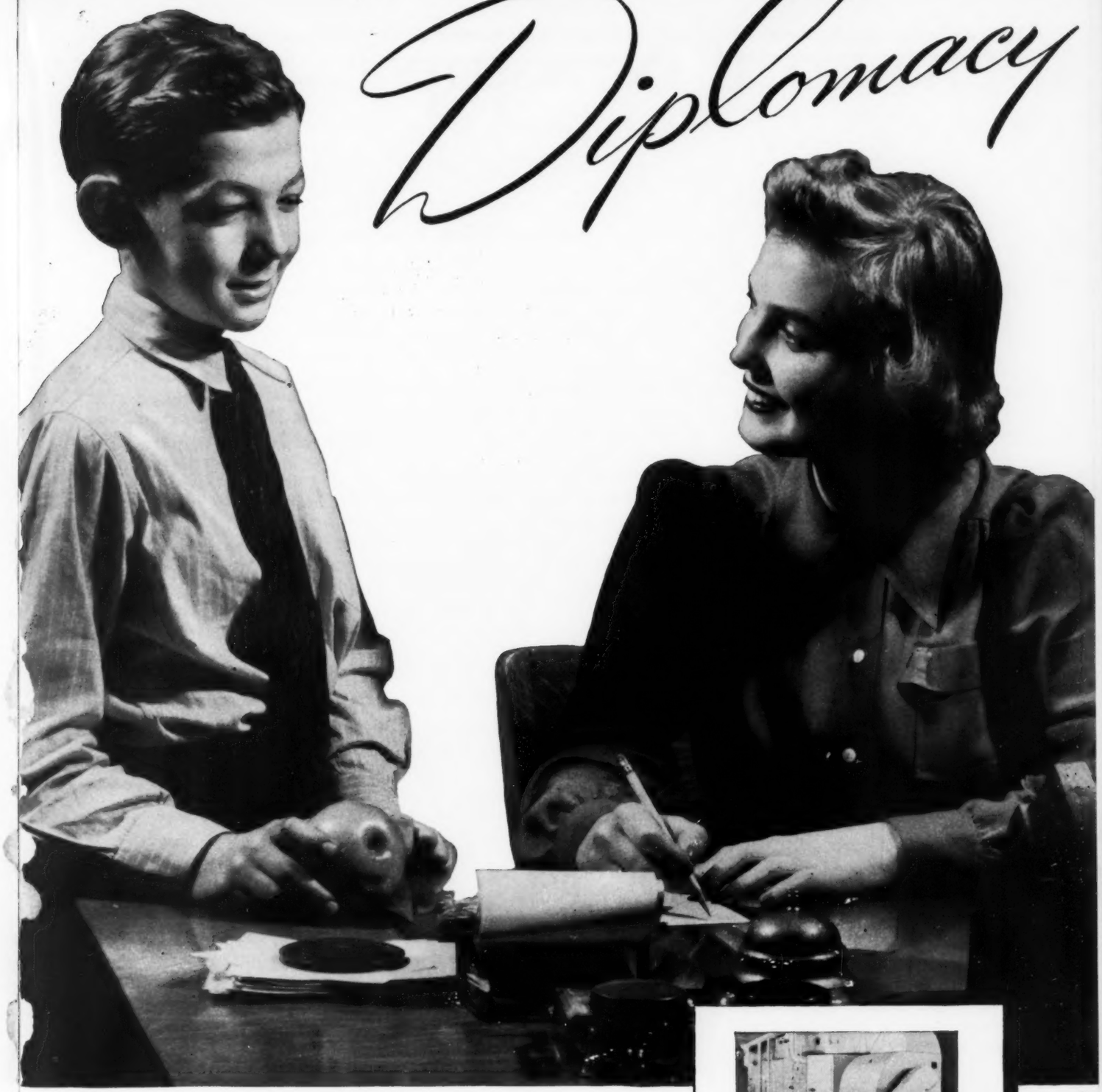
Another valuable activity, and one that gives continuity to the program, is the organizing of bicycle clubs. In the local situation the aid of the municipal recreational department has proved most helpful. This is particularly true during the summer when, for the greater part of the time, the schools are not in session and leadership from that source is not available to the club members. These clubs have had a remarkable effect on the whole program of bicycle safety. It is their purpose to conduct bicycle races, hold bicycle field days, organize trips, inculcate safety practices and teach boys and girls how to keep in good physical condition and how to take care of their bicycles. Aimlessness in the use of this well-nigh universal vehicle, which is the major factor in its unsafe use, gives way to definite direction and objectivity.

Pupils are encouraged to ride their bicycles to school. This makes them feel that the machines serve a purpose other than play. It gains their good will. It also provides another situation for pupil activity and participation, another place to draw up rules and enforce them. Parking racks are provided and each pupil is assigned a space. Thus, there is no occasion for jockeying for favored or convenient spaces. The parking area is under the supervision of the safety patrol boys in the morning, at noon and again at the close of the school day, assuring the orderly coming and going of a host of enthusiastic and exuberant youngsters. Rules have been drawn up governing the use of bicycles around the school, one of the most important of which is that bicycles must be parked promptly upon arrival.

A feature of the campaign that is especially enjoyed is a movie entitled "Bicycling With Complete Safety." The picture is shown toward the close of the campaign to a general assembly of all pupils. It sums up vividly the common causes of bicycle accidents and illustrates how they can be avoided. This film can be obtained from Cycle Trades of America, Incorporated, 3510 Chanin Building, New York. Excellent posters and suggestions for organizing bicycle clubs, bicycle ordinances and driving tests can also be obtained from the same source.

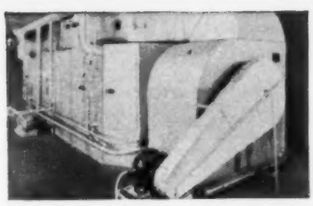
Lest the reader get the impression that this program entails the use of too much time and energy, it should be stated that it actually does not take much of any one person's time nor does it disrupt the regular curriculum of the school. It is, in fact, a valuable and suitable activity for modern schools in which agencies for student participation, such as adviser rooms, student councils, safety patrols, student courts and similar organizations, normally function.

Diplomacy



Young diplomats are pretty smart these days. They're smart because they have intelligent direction and a school system that is unsurpassed in any country in the world. They're smart because everything is provided in the schools to make them "healthy, wealthy and wise."

It has been our privilege to co-operate in providing the heating and ventilating systems for many of the nation's newest and finest schools — equipment that is a first essential in protecting health and assuring constant comfort. We will be glad to co-operate with you, too, in planning for the improvement of your new or present school's heating and ventilating. Write today for data. Then get a bid on these time-proved American Blower products from your heating contractor.



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The Local Newspaper—

Best Friend or Severest Critic?

FREDERICK J. MOFFITT

Director of Public Relations, New York State Teachers' Association

TO THE educational leader who feels that part of his job is an interpretation of the school, the importance of the small weekly newspaper as an avenue of interpretation cannot be overrated. It is a sound medium and one that goes beyond the immediate step.

It is a medium, however, that is poorly understood. It has its own rules that are often ignored by those who wish to use it. It has its own peculiar earthy dedication to patriotism and duty that is not recognized by the unthinking. Its customs and prides and idiosyncracies are blithely violated.

In these days it is important that the public school lose no opportunity to present its case to the public. Its basis of support is challenged both by economic rainbow chasers and by more profound thinkers who recognize the changing bases of American life.

The school serves a public that is confused and irritated by changing theories of education. If school procedures lag behind the best social thinking, there is sharp criticism. If the school attempts to assume a militant leadership, it is chastened by the patrons.

Public Should Have Facts

At no time in its history has there been such a need for proper interpretation of the school to the public. The problems, the attitudes, the ideals of free public education must be brought in increasing measure to the attention of every citizen and the story must be told again and again through every available channel.

If every school person who would interpret the school would work with the news channel that is right before him, the combined effort would reach down into the grass roots of all America and the entire educational world would be summarily strengthened.

The first move in such a task is simple. The interpreter must cultivate the editor of the local newspaper. This does not mean that the pedagog must stoop from his lofty position to pat the editor on the back. Newspaper editors are allergic to back-patting. But if the school interpreter would like to obtain a clearer view of his own job and if he has a real desire to become a better all-round school person, there is no finer way to learn the fundamentals of his job than by friendly contact with the nearest editor. There he can learn the ways of democracy and whims of mass psychology that have never been written in any textbook on methods of interpretation.

Every educator owes it to himself and to his school to become a friend of the local editor. He can thereby arm himself against the barbs that fly by day and the telephone calls that come by night. He can avoid the sting of the editorial pen and the caustic comments of cynical syndicated columnists. What is much more important, he will find an understanding, a sympathy and a friendship built upon solid ground. He will gain support for education not only in his own district but in far off fields.

The newspaper editor and the pedagog have a great deal in common. They serve the same frightened and confused public; they usually are motivated by the same high ideals of service; they both fight indifference, sloth and ignorance; both are idealists in the cause of ideas. Yet, too often, because of the misunderstanding or timidity of one or the other, they fail to get acquainted. While the puzzled schoolmaster draws himself aloof upon his educational mountain, the local editor becomes president of a taxpayers' league and takes to walloping the school.

To the conscientious school interpreter who is anxious to do a good job the author commends the small town newspaper, for it is a powerful weapon that the schoolman will do well to enlist as champion of the cause he is serving

The editor is a man whose knowledge of practical affairs is an erudition all its own. No brass plates on his door separate him from the world and no batteries of efficient secretaries turn away hoi polloi. His own shrewdness and insight into motives are his only protection from stuffed shirts and self-advertisers alike.

Controls Public Sentiment

Unusually humble and unassuming, begrimed with the daily tasks in the composing room and the rough and tumble of practical politics, here is a man who knows his own constituents inside and out, who ponders not too deeply of the state of the nation but is able to change community sentiment overnight.

The editor is not a man to be carried away by the latest slogan; he is slow to accept new ideas but is a tower of strength once he is convinced that an idea is sound. He is the man who has the official power of life and death over the institutions of the community. A word from him and the latest idea of progressive education will fall by the wayside or be accepted and given a sympathetic hearing by the citizenry; a stick of type in the editorial column and the sourest critics will lose their zest for making trouble; a sharp comment attached to an innocent news item and the reverberations may echo for months to come.

The country editor probably has children in school, an interest in the parent-teacher association and a second mortgage on his printing press that entitle him to a seat among aggrieved taxpayers everywhere.

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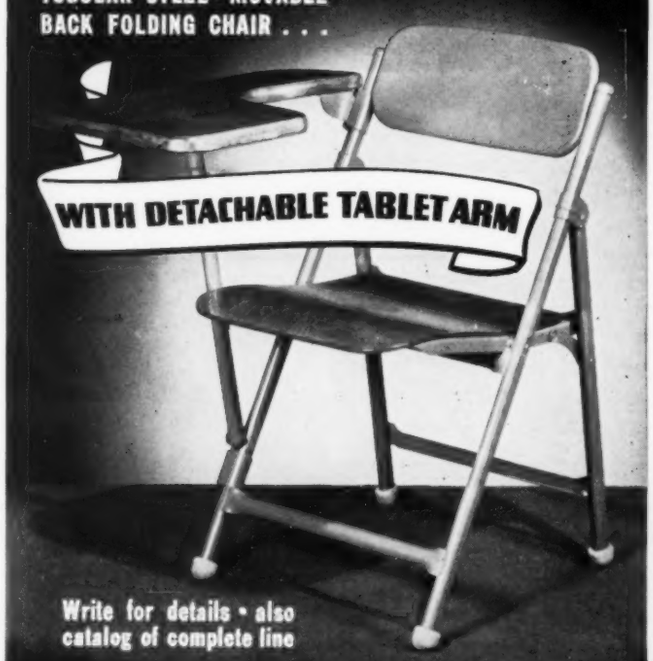

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City ..... State .....

Scotch Public Library

Than such a one, there is no greater friend of the school if he is firmly convinced that the school is run economically, efficiently and with the interests of the children and the taxpayers at heart. There is no more relentless critic if he believes that the school is given over to half-baked theories or ephemeral planning or that it is attempting to high-hat either himself or the community.

The school interpreter and the local editor must make their contacts on a man-to-man basis. There must be tolerance and friendship, something not at all difficult when such kindred souls meet for the good of the community. The school interpreter is not asked to kowtow at the feet of this community master but is simply to make an honest attempt to understand what makes the editor and his paper click, to catch a glimpse of the philosophy that guides him.

Editor's Friendship Valuable

In the little newspaper office the friend of the school is likely to find as high a code of ethics as he could desire in his own schoolroom, although, possibly, it is worded in non-academic terms. He may even discover a friendship that will be a solace to his spirit in time of need and that will rebound to the everlasting advantage of the school, the children and the community.

The country newspaper has its idiosyncrasies and peculiar technics. It has its homespun philosophies and its fierce likes and dislikes. The canons thus set up are, as often as not, violated by the school interpreter who wonders why he fails to get the attention and space that his cause so obviously deserves.

This failure to observe the amenities of grass-root publicity is an indictment that will be indignantly denied by the school authorities, yet a casual checkup with the newspaper office will prove that the schoolmaster is held in some amusement in the offices of the local press, at least as far as his ability as a newspaper writer goes.

Before the pedagog denies his sins as a reporter, he might make a survey of the situation that brings him into such low esteem in the eyes of his compatriots. He might remember that many of the rules for good writing that are so carefully set forth in the "how-to-do" books are largely thrown out of the window by the small town newspaper.

The editorial sanctum becomes a blitzkrieg as the deadline approaches and material is cut to fit space or is discarded altogether to make room for the last minute classifieds. If on these tumultuous days the editor gets a plethora of fine writing or wordy copy, he either throws it in the waste-basket or allots it space under the advertisement for vegetable compound.

Most school people have vainglorious pride of authorship. Most editors have none. The editor says what he wants to say in a few words and to the point.

If the paper comes out on a Wednesday, the rhetorical writing must be done and in type the previous week end. Rule No. 1 for the school interpreter is to get his copy in well ahead of time. President Theodore Roosevelt always arranged his big news breaks for Monday morning when the press was at its emptiest. Lesser news-makers might well take heed.

Rule No. 2 is: Let such copy be neat, concise, correct, without personal bias and typewritten on one side of the paper, double spaced.

Faults of School Writers

Wordiness, highfalutin writing, pedagese, nonsense and boring erudition are accepted faults of the school interpreter that are endured but not enjoyed by the editor. In addition, the average school interpreter has faults all his own: a tendency to preach, a maximum of personal opinion and too little news. He is flowery when he should be brief and he is too brief when plenty of facts would bolster his story. He cultivates a "school" style so that his story smells strongly of propaganda. He sometimes forgets that his business is to interpret the school rather than himself.

Probably more school interpreters are accused of being self-advertisers than any other group. Many a good school writer has gained such a reputation when personal publicity is distasteful to him. Unfortunately, he has been aided and abetted by an editor who may have run short of news at a critical moment. A good school is always news because it is the biggest and most important business in town. The school interpreter must recognize that school publicity can be as easily overdone as underdone. Somewhere there is a happy medium.

To the school publicist many of the rules set forth may seem trivial and unimportant but they all help to oil the machine and eliminate the squeaks. The public that is served by the small town newspaper demands news of the school. It is entitled to this news. It is better that it should get it through some recognized and respected medium than from backdoor gossip.

To others who are anxious to do a good job in their school publicity the points made here may seem contradictory and confusing. Of course, they are. So is the small town newspaper. Its policy is determined by many events and many people and its course of action is often unpredictable.

In the face of this unpredictablity, what shall the school interpreter do? There is one basic understanding that he must gain; having gained it, many of his doubts and questionings will fall away.

Must Have Basic Philosophy

The interpreter of the school must know how to state his own school philosophy. He must know where he is going and what he is trying to accomplish and why. Shall I plan a school page and what shall it contain? Shall I allow the classes in journalism to handle the news reporting? Shall I impress upon my board of education the importance of publishing a full and open account of every board meeting? Shall I ever try to suppress school news? These questions can easily be answered in the light of the philosophy that guides the school in all its relationships.

If the basic philosophy of the school is not sound, well thought out and applicable to the community, it is useless to ponder on problems of school and newspaper relationships.

But if such a philosophy is well founded and carefully followed, if it is based on the needs and ideals of the community, if it works to make the aspirations and hopes of boys and girls come to a living reality, then it will find true interpretation and substantial support in the small town weekly.

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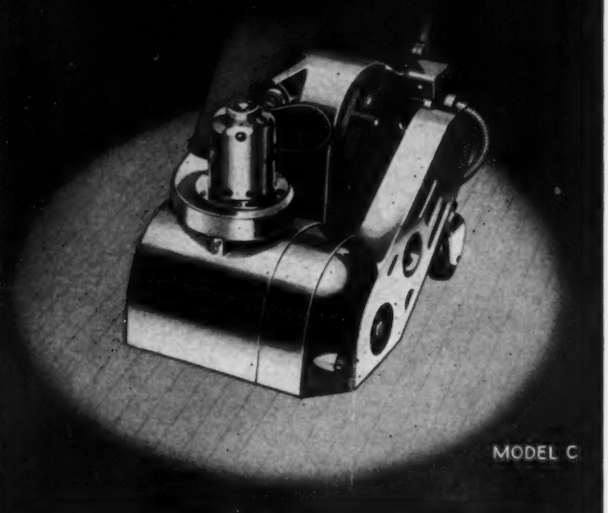

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New State Laws for Pupils

M. M. CHAMBERS
Specialist in School Law

THE impact of the defense crisis upon state school legislation of 1941 has taken several forms. For the accommodation of pupils desiring to equip themselves for mechanical and technical pursuits, provisions were made for the establishment of new state vocational schools in Nebraska and Oregon. The defense effort has also undoubtedly motivated new statutes in some states looking toward improved health care of all pupils. With an eye to the expanding national defense activities, no doubt, Nebraska appropriated $25,000 for the ensuing biennium to pay the claims of local school districts in the state for tuition of children whose parents are officers of the United States Army, Navy or Marine Corps on duty in the state.

State Trade School Created

Nebraska created a state trade school by transferring an institution known as "the branch institution of the Sailors' and Soldiers' Home at Milford" to the control of the state board for vocational education and by authorizing its operation as a trade school open to high school graduates or others who have reached the age of 17 and have the ability to profit from the courses for which they may apply. The purpose of the school is to afford the inhabitants of the state "the means of acquiring skills and related technical knowledge other than that taught at college level, by training methods necessary to prepare them for advantageous entrance and satisfactory advancement in trade and industrial occupations." An initial appropriation of $32,000 was made and any federal appropriations that may be applicable will be accepted.

Oregon provided for the establishment of regional vocational schools by the state board for vocational education and earmarked one sixth of the 2 cent tax on cigarets to finance it. This is expected to produce a little more than $300,000 for the purpose unless the cigaret tax act is defeated by referendum. Soon after its passage an effort was begun to obtain the signatures of 5 per cent of the electorate on a petition that would subject the measure to a popular referendum next November. Meanwhile, its operation is suspended.

The extension of free transportation and free textbook facilities at public expense to pupils in private and parochial schools continues to be a live issue.

The state of Washington enacted the following law: "Whenever any district school board shall . . . provide transportation for pupils attending public schools, all children attending any private or parochial school under the compulsory school attendance laws of this state shall, where said private or parochial school is along or near the route designated by said board, be entitled equally to the same rights, benefits and privileges as to transportation as are so provided for by such district school board for pupils attending public schools." This new statute is similar to others that have been enacted in recent years by several states, including the neighboring state of Oregon in 1939.

This year Oregon took a further step by passing a measure providing for free textbooks for pupils in private and parochial schools and the governor allowed it to become a law without his signature, whereupon a movement was immediately started to invoke a popular referendum on the measure at the general election next autumn.

West Virginia clarified the matter of possible conflict between the compulsory education statutes and the exclusion of pupils from school for lawful reasons by providing that whenever a pupil is suspended, expelled or refused admission on account of his failure or refusal to comply with lawful requirements of the school or of the county or state boards of education, he shall be excluded until such regulations are complied with, and his parent or guardian shall be liable to prosecution under the compulsory school attendance act for his absence from school.

Oregon enacted a measure permitting districts that do not maintain high schools to transport their own pupils to high schools outside the district in lieu of contracting with existing high school districts for such transportation, as was formerly required. Another new Oregon act authorizes school boards to acquire motor vehicles for the transportation of pupils under purchase agreements calling for annual installment payments.

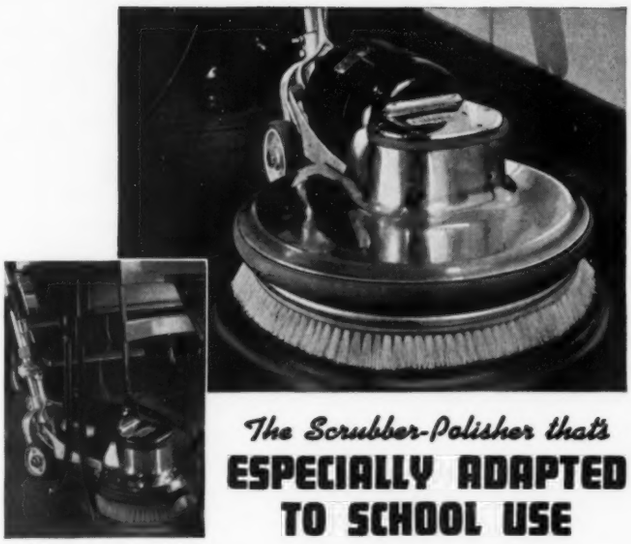
Laws for Bus Drivers

Arkansas forbade the driving of school buses by any person under 21 years of age or by anyone who is known to be physically or mentally defective, who has a reputation as a reckless driver or whose qualifications are not in full compliance with the regulations of the highway commission and the state board of education regarding school bus drivers.

The act also declares that school bus drivers shall be personally liable in damages for the death or injury of any school child resulting from the failure of the driver to use "reasonable care." A companion act declares that all school board members shall be fully immune from personal liability for injuries arising out of their acts, conduct or omissions in their official capacities.

Indiana enacted a curious statute that requires teachers to dismiss their pupils whenever the temperature of the schoolroom falls to 60°F. and also requires them to send home immediately any pupil who is perceptibly ill in any way or who is obviously unclean or infested with vermin. The same act requires medical inspection of pupils when a communicable disease appears in the school but exempts pupils whose parents may object.

An x-ray examination for tuberculosis is required for all school employes once every three years, but nothing is said about any such examinations for pupils. Infected employes are ineligible for further service until proof of recovery.



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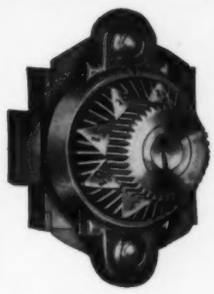

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Teachers on tenure do not lose any rights unless their enforced leave of absence exceeds three years.

Washington directed that every school board shall arrange for testing the hearing of all school children to discover whether they have defects sufficient to retard them in their studies. Tests must be made annually in districts having fewer than 25,000 pupils in attendance but may be made only once in two years in larger districts. They may be made by county health officers or school medical directors, but if that is not feasible, the tests shall be made by superintendents, principals or teachers. Records of tests of all children found to be hard of hearing are to be kept by the teacher and copies sent to the parents, to the state superintendent of public instruction and to the state director of health.

Oregon broadened the authority of school boards to equip their schools with supplies, apparatus and services deemed essential or advisable. The new statute makes it clearly lawful for school boards to maintain and operate cafeterias in public schools of the commonwealth. Arkansas has specifically exempted from the state sales tax the gross receipts from the sale of food in school and college cafeterias and lunchrooms operated primarily for teachers and pupils.

West Virginia revamped the statute requiring regular courses of instruction in the history of the United States, in civics and in the constitutions of the United States and of the state of West Virginia. The new law applies to all public, private and denominational schools. The state board of education must prescribe the courses of study for public elementary and high schools and normal schools, and the authorities in charge of nonpublic schools must prescribe similar courses.

Violation of these requirements by any person is made a misdemeanor subject to a fine of not more than $10, and each week of violation is a separate offense. Violators who are employed by the public schools shall be automatically removed from their positions and shall be ineligible for reappointment to any similar position for a period of one year thereafter.

Washington revamped the statute regarding the teaching of social studies. The new law directs the state board of education to prescribe a one year course in the history and government of the United States and the equivalent of a one semester course in the history and government of the state of Washington. These courses are expressly required for graduation from any eighth grade or high school in the state. All teachers' colleges and all teachers' curriculums in other educational institutions must require a one quarter or one semester course in Washington state history and government as a prerequisite to graduation.

West Virginia required the state board of education to cause the subject of scientific temperance to be taught in all public schools, with emphasis upon the effect of alcohol and narcotics upon the human system and upon society in general. Textbooks adopted for use in health and hygiene, biology and the social sciences must contain appropriate material for such teaching. Violation of these provisions is subject to the same penalties as violation of the statute requiring teaching of history, civics and the federal and state constitutions.

To Earn Professional Status

A. W. BAISLER
Teacher, New Concord High School, New Concord, Ohio

MUCH has been said, but little done, concerning the prospect of dressing up the vocation of teaching to the point at which it resembles a profession. Although this ambition may be desirable, the methods and instruments used for its realization are futile and inadequate to accomplish the result. Those who believe that teaching has acquired the status of professionalism simply indulge in wishful thinking.

The following points of constructive criticism are offered to correct the existing confusion.

1. Teaching as a profession must not be subject to any authority that is foreign to the objectives of the teaching field. This authority must evolve from the members of the group itself and the regulations must be self-imposed.

2. According to existing standards the teacher is a day laborer. One hundred and eighty days of work complete his contract, regardless of the results therefrom. Little or no attention is given to the measured outcomes of his experience. I would advocate a system whereby the completion of a syllabus, accepted by the administrative department, would be the determining factor that would terminate the course of study.

3. As a professional group, teachers must draft a code of standards and ethics that will give teaching a character of the highest possible interpretation. This code must be so constructed that its elements are imposed by the group itself and that violators are penalized by virtue of the same authority.

4. Another essential is the growth of an educational association of national scope that is so effective that it will set nation-wide standards for certification, depending upon local teacher needs; establish standards of tenure; develop a minimum salary scale with due respect to the ability of the community to pay, and advise and aid in the preparation of future teachers.

5. One more feature that is essential to the success of this ideal is strong leadership. This has been significantly lacking in educational circles to date. No doubt that is why our schools are generations behind our industrial and social systems. The potential leaders are in the ranks; what they need is a dominant purpose and an insatiable desire to accomplish it.

Is not this universal need a challenge? How can the teacher lead his pupils toward the democratic way of life when he is denied the responsibilities that would make him conscious of his moral obligations? If the school is the important instrument in preserving American democracy that it is said to be, does it not follow that those who constitute the teaching group of that school must be experienced in the true significance of democracy?

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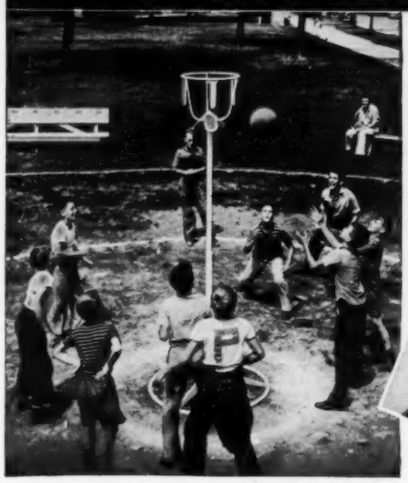

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CAFETERIA management for vocational pupils in the schools of Niagara Falls, N. Y., comprises a course that has been carefully prepared by Helen J. Neff, cafeteria manager, in which three girls are assigned to a school during a period of two weeks. They receive lunch but no compensation. Their hours range from 8:40 a.m. until 1 p.m.

During the course special emphasis is laid on the following points: (1) personal cleanliness, *i.e.* clean hair, uniform, nails and hands and absence of perspiration; (2) use and care of equipment; (3) standards of food; (4) general cleanliness of kitchen.

Monday, the first day of the course, is devoted to observation.

Tuesday morning all three girls prepare sandwiches; one slices the bread and wraps the sandwiches; another makes the fillings, slices the meat or cheese and assembles the filled sandwiches, while the third spreads the bread with butter. During the lunch period one observes and helps at the steam table, the second sells milk and the third sells ice cream and makes sundaes. The girls alternate at the steam table, milk counter and ice cream counter throughout the two week period.

Wednesday morning one pupil sets up the menu board, the second makes ice cream sauces and the third prepares the cookie tray, pretzels, potato chip rack, crackers and candy for the counter. All three set up the counter and fill the steam table.

Thursday morning two of the girls dish up and decorate the desserts for the counter, cut pie or cake and place it on plates for serving, while the third makes mayonnaise in the mixer and mashes and seasons potatoes. On Friday all three make jellied salads and peel potatoes in the peeler.

Friday morning one girl is assigned to cleaning the refrigerator, putting aside and making note of foods to be used the following week; she also cleans the slicing machine. The second girl cleans and scours the dishwashing machine, and the third cleans the storeroom and puts it in order. All three make salads.

On Monday of the second week the three girls check incoming groceries and put them away, prepare salad greens, check storeroom deliveries and put the goods away. They go over the menus for the week, keeping necessary changes in mind to permit the use of foods found in the refrigerator on Friday. They also consult Miss Neff on these changes when telephoning in the afternoon order.

For the rest of the week the work is the same as the previous week, the girls alternating on the various jobs.

Following are certain rules that must be observed in making sandwiches and salads, care of the counter, setting up the menu board, making ice cream sauces and desserts, selling ice cream, dishwashing and the care of the equipment.

Sandwich Making

1. Cut bread 48 slices to a loaf, excluding crusts.

2. In preparing lettuce, use the outside leaves and save the inside cup shaped leaves for salads. When lettuce is delivered it should have the heart cut out deeply and a strong stream of cold water should be run into it to loosen the leaves. Shake off and put in a covered utensil in the refrigerator.

3. Slice meat 13 slices to the pound. Save crumbs and ends for ground sandwiches.

4. Slice cheese 14 slices to the pound.

5. Butter should be left out of refrigerator each day for the following day for softening. The dish in which it is kept must be washed out twice a week to prevent rancidity. One pound of butter must cover 80 slices of bread. In case of sandwiches with filling spread on or when mayonnaise is spread on, as in lettuce sandwiches, only one slice of bread need be buttered, but in case of sliced meat and cheese, both slices must be buttered. *Note:* Care should be taken to cover bread completely.

6. Use small scoop for measuring fillings whenever possible.

7. Wrap plain bread and butter sandwiches in green paper. Whole sandwiches sell for 2 cents and halves for 1 cent. Lettuce sandwiches are put in glassine bags and filled sandwiches are wrapped in white paper. Be sure the wrappings are secure so they will not come apart on counter.

Salad Making

1. Endive and cress should be washed before it is put into the refrigerator, particular care being taken to remove tiny black stones and particles of dirt from the roots of cress. Watercress turns yellow quickly and so must be used within a day or two after purchase. Endive, on the other hand, keeps almost indefinitely. Coarse, tough portions of endive should be eliminated when preparing salads. Endive is preferable to lettuce because it keeps much better, goes farther and is more colorful. Salads should be made as late in the morning as possible to prevent wilting.

2. Jellied molds are prepared the previous afternoon.

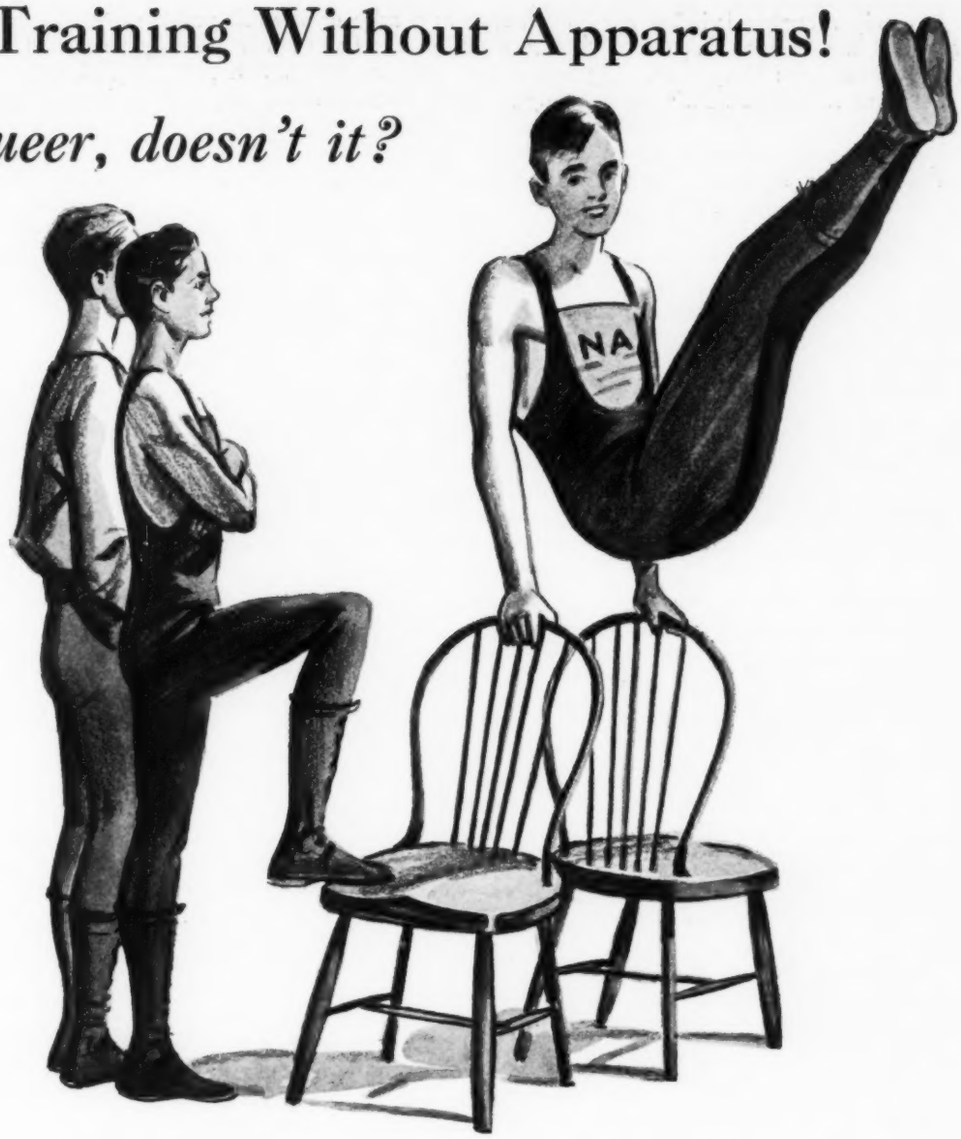
3. Vegetables should be marinated in French dressing and then thoroughly drained before serving. Potato, macaroni, fish and cabbage are mixed with dressings before serving. Fruit, molded and egg salads have no dressing put on them. Bowls of mayonnaise, fruit, French and Thousand Island dressings are put on counter daily, the variety depending on the kinds of salads being served.

4. Appearance is the most important thing to consider in salad making. Plates should be spotless and cold. Greens should be carefully arranged on the plate. Sales can be increased at least 50 per cent when salads are attractive and colorful.

5. Whenever possible, it is advisable to use a scoop for measuring to ensure equality in portions. This does not always necessitate a round mound of salad, as this contour may be broken up after the scoop has accomplished its purpose as a measure of the portions.

Physical Training Without Apparatus!

Looks queer, doesn't it?



No one would think of training students in gymnastics without rings, horses, parallel bars, etc. Even today some schools conduct courses in Office Practice without machines but the number is constantly decreasing.

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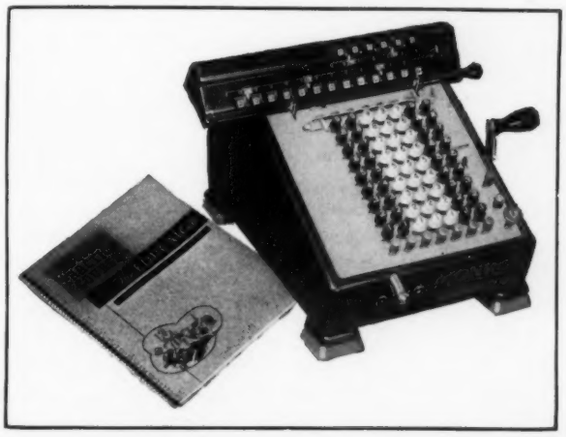

MONROE

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6. Put only enough salads for one lunch period at a time on the counter, leaving the rest in the refrigerator.

7. Standard recipes of boiled dressing and fruit and mayonnaise dressings are followed. Enough should be made at one time to last a week. Whipped cream that is not fresh enough for desserts may be added to any of these or a sour cream dressing can be made from it. Our French dressing is purchased and thinned down with fruit juice or vinegar.

Counter

1. Silver must be arranged neatly in boxes or on trays at the end or at the beginning of the counter. It is put in these containers in the afternoon when it is washed. All handles should point toward the customers. Containers should be washed daily before they are refilled.

2. Sandwiches, salads, ice cream, candy, desserts and milk should be kept as far as possible from the steam table. Pretzels, crackers and potato chips may be nearer the heat.

3. Salts and peppers, which are kept filled and clean, should be distributed at intervals along the steam table, and bowls of mustard, relish and catsup should be put out when food requiring these condiments is on the menu. Always remember to put spoons in these bowls and in those containing salad dressings.

4. In arranging food on the steam table, keep in mind speed and ease of serving; for example, put the gravy next to the potatoes; all vegetables close together, and foods for special plates as near to each other as possible.

Menu Board

This may be set up from the menu and price list either after lunch or the first thing in the morning. Attention should be paid to correct spelling. The felt board should be brushed frequently. Letters and numerals should not be omitted. If any food runs out during lunch, it should be removed from the board.

Ice Cream Sauces

These are made from standardized recipes and enough should be prepared at one time to last several days. They should not be kept in the refrigerator as the butter in them hardens.

Desserts

1. Pies are cut into seven servings after being marked off with our cutter.

2. Layer cakes are cut in 12 pieces; large loaf cakes are measured off by a marker. In putting pies and cakes on the counter, all points should be turned in the same direction.

3. In dishing up desserts a given number of servings from a certain amount of ingredients is noted on each recipe card. Anything in the nature of cake, such as cottage or steamed pudding, is put on bread and butter plates rather than in sauce dishes. Soft puddings, such as custards and fruits, are served in sherbet glasses. Baked custards are left in the molds in which they are baked; these are set on bread and butter plates. The outside of all dishes should be free from stickiness before they are placed on the counter. Decoration is important. Ingenuity is necessary in utilizing whipped cream, maraschino cherries, coconut or nuts for toppings. Desserts, like salads, should be kept in the refrigerator until the last minute before serving.

Ice Cream

Care must be used in putting ice cream suckers on the counter for sale, as they are breakable and melt rapidly. As little handling as possible must be given them; therefore, only a few should be placed on the counter at one time.

Dishwashing

1. Dishes must be scraped and placed in racks in the dishwasher in such a way that all surfaces will be exposed to the water. It is advisable to soak macaroni, spaghetti and noodle dishes a short time before putting into the racks. This will lessen the time required in the machine. Dishes should be left in wash water, which should be from 140° to 160° F., for one minute. The rinsing should be instantaneous only, because the more rinse water that runs into the tank, the weaker the powder solution of the wash water becomes. Therefore, powder should be added in the middle of the washing period, as well as at the beginning. To prepare the washing machine, the tank should be filled with hot water and ½ cup of powder. Another ½ cup should be added later.

2. Silver is laid in baskets, not too much to a basket, and trays are stood up in racks like the dishes and washed as above.

3. Dishes are wiped because there is not sufficient room to let them stand to dry.

Equipment

1. The refrigerators must be thoroughly cleaned inside and out and defrosted once a week.

2. Ovens must be thoroughly cleaned once a week with hypochlorite used for bleaching.

3. The top of stove must be cleaned every day.

4. The ice cream cabinet must be wiped off with a damp cloth every day to remove loose chocolate and nuts. The cabinet must be thoroughly cleaned and defrosted every vacation.

5. The dishwasher trays must be emptied every day and the doors left open. All water valves should be turned off tightly. Once a week the inside of the machine must be scoured with steel wool to remove dirt and scale and the outside of the monel metal machines should be polished with cleanser.

6. Sinks should be cleaned daily and left with the faucets turned off tightly.

7. The slicer should be wiped off daily to remove crumbs. Whenever cheese, meat, tomatoes or oranges are sliced, the machine must be carefully washed to prevent any food remaining that might become rancid. This should be done once a week even though none of these foods has been used.

8. Mixer attachments must be washed and dried thoroughly every day.

9. The potato peeler must be thoroughly rinsed out and carborundum plate in bottom removed each time it is used. It should be left open to dry thoroughly.

10. Milk cabinets must be washed and wiped out daily after lunch.

11. The steam table must be drained of water daily, and the top washed thoroughly. All monel metal must be polished with cleanser at least once a week. Shelves underneath must be washed once a week. Keep only enough dishes under the steam table for daily use to avoid handling at time of washing shelves.

12. Floors are to be scrubbed daily in the afternoon and wiped up before lunch if necessary.

FOOD FOR THOUGHT

• Winning S. Pendergast, supervisor of school lunchrooms, Detroit, reports that a second semester of training has been added for school lunchroom managers in which the students serve in a big lunchroom as assistant manager, at the regular assistant salary. And she adds, "We are extending this type of training to managers of our elementary school lunchrooms. Of course, the requirements are lower and the type of instruction is much more limited in range but through it we are raising our standards of management in elementary schools, too."

• Too much care cannot be exercised in eliminating fire hazards in the kitchen. Should an emergency arise, however, rush for the extinguisher or throw salt or sand on the blaze. According to one fire inspector, if grease is burning in a pot, a burlap bag may be thrown over it and salt or sand, on top of this. Never use sugar, corn starch or flour; the sugar will burn and the cornstarch and flour are combustible.

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Experiment in School Lunches

MARGARET C. MOORE

Consultant in Nutrition, Louisiana State Board of Health

Report of an experiment that was conducted to prove that the logical remedy for the menace of malnutrition among school children lies in school lunches that are adequately planned and served

LOUISIANA has 42 full-time health units that serve more than 80 per cent of the rural population. The directors of these 42 units probably examine more school children than does any other group of physicians in the state and all of them agree that malnutrition is the greatest health problem in the schools.

Since it was felt that an adequately planned and served school lunch would be a logical remedy for this condition, the diets of fifth grade children in six selected parishes of the state were studied to learn where the greatest deficiencies existed so that a school lunch might be planned which would balance the deficiencies in food eaten both at home and at school.

Thirty-six thousand diets were collected and the first 4000 of these that were analyzed indicated an excessive use of refined cereals. This practice was widespread and there was no compensating food habit to increase the vitamin B_1 intake, which was found to be deficient in the diets reported.

For growing children, the vitamin A intake was marginal. The calcium intake was also marginal and the general average was misleading because many children consumed from five to nine glasses of milk a day while others were deficient in all sources of food that would supply calcium.

A rural consolidated school in which about 100 children were served from the lunchroom was chosen to test the accuracy of these observations. Since the manager of the lunchroom was already overworked, it was decided to make only minor changes in the established routine. These changes were applied only to the group studied and they consisted of serving each child a half pint of milk every day, a very green or a very yellow fresh vegetable twice a week and one tablespoon of wheat germ each day mixed in some food prior to serving.

The 60 children whose parents gave written permission for them to be included in the experiment were divided into two groups. The children in the first group continued to eat as they always had, *i.e.* plate lunches, sandwiches and any or no drink; the others ate the 10 cent plate lunch, as previously described, and a glass of milk. Records on this group were kept by a captain who punched each individual's card when the milk was consumed and when the plate lunch was eaten. (Since the wheat germ was never included in the rice, the children were allowed credit for their plate lunches if the rice or white bread were uneaten.)

With no supervision, the two groups of 30 children each had approximately equal weight gain curves for the period extending from September to January. In January, the groups were separated and the planned lunches were served to the one group while the other continued to eat in the accustomed manner, usually sandwiches, soda water and candy or cake.

At the end of May, the group receiving the planned lunches, in which adequate calcium and vitamins A and B were included, was distinctly ahead of the other group in weight gained. The average weight gained was approximately 2 pounds more than that of the group left to eat according to its own devices.

In Louisiana there is no official cooperation between the state board of health and the state board of education on the problem of school lunches. In the full-time health units, consultant service regarding nutrition has been offered to all school lunchrooms. Two pieces of literature, "School Lunch" and "Cafeteria School Lunch," have been prepared and circulated for more than a year. Copies of "School Lunch" are given to teachers or parents; "Cafeteria School Lunch" is distributed only to persons who are responsible for planning school lunches.

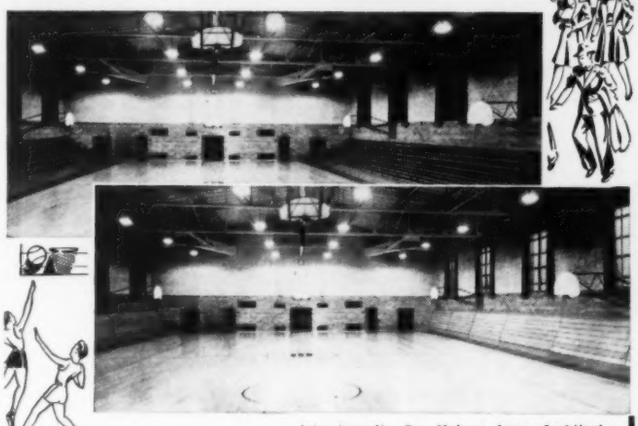
The agencies that are cooperating in serving the school lunches in this state are the local school authorities, the parent-teacher organizations, the Federal Surplus Commodities Corporation, the W.P.A. and, occasionally, such charitable organizations as the American Legion. The use of federal surplus commodities is discretionary with each school superintendent.

The aim of the health department is to create a realization of the need for school lunches and to have the health unit personnel trained so that the nurse and the doctor will be capable of giving nutritional advice and the sanitarians will be cognizant of the duties of the management as food handlers in the school.

It is obviously impossible for the one consultant in nutrition employed by the state to give individual attention to every lunchroom, but advice and help are given whenever possible and classes for school cafeteria and lunchroom managers are to be held during the coming year in parishes in which this service is requested.

Every effort is made by the consultant to keep informed of the difficulties encountered in the state and to help whenever possible. For example, assistance was recently given to schools that had encountered difficulties with the use of oatmeal that was distributed as a surplus commodity. Copies of recipes and suggested uses are being sent to all lunchroom managers who are using the surplus commodities.

PLENTY OF SEATING CAPACITY TONIGHT!



John Normile, Des Moines, Iowa, Architect

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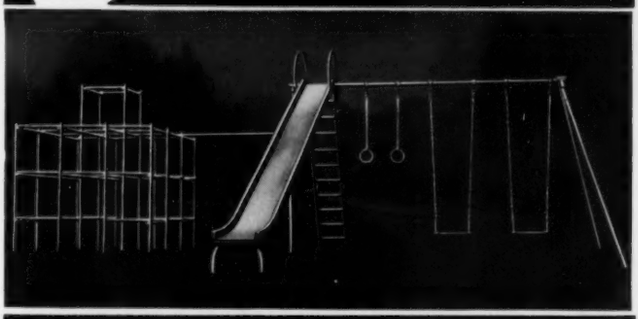

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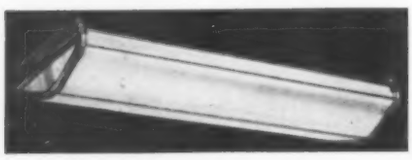

There are many models of GUTH Fluorescent Fixtures from which to choose. A typical one is shown above.

Send us detailed information on your lighting problems, and we will submit complete facts which will be interesting and helpful to you. No obligation!

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Leaders in Lighting Since 1902
Guth

Chalk Dust

Frederick James Gaffney

WHAT shall a schoolmaster do with August? Whereas June has its climacteric orgy of diploma issuing, speech-making and otherwise disposing of the surplus of educational production, and July is the month of repairs when the school buildings, the large accumulation of stepped-on toes and the board of education have to be renovated and medicated, August offers no such promise of excitement.

August is the month euphoniously and somewhat inaccurately referred to as the "happy vacation time." It is the month when, without benefit of pay check or bank account, the school teacher skips blithely yon and here accepting free board from such kin as will provide it. It is the ho-hum month when the school secretary leaves to recuperate from her annual nervous breakdown and, if possible, to store up energy to meet the storms and stormers of the year to come.

• •

WHETHER vaction keeps or not, school teachers everywhere will continue to interpret the schools they serve. For, in class or out, the classroom teachers of America are the real interpreters of the school. In the hearts and minds of the public, they exemplify the dreams and aspirations of American youth. They represent one of the greatest and most hopeful phenomena of democracy—a free people working in a free way to lift the world to better things.

How best can I serve to interpret my school this summer? By striving to visualize the increasing significance of my job in a time of crisis and by so working that the public may increasingly understand that without free, unhampered public education, democracy dies. By preparing as never before to become an interpreter for democracy to a generation that is increasingly harrowed and bewildered by the brutalities opposed to that way of life. Specifically, by improving my own background through planned reading, study or purposeful travel that I may the better understand the opposing social forces in the world today.

I can serve my school by reexploring the needs of democracy's boys and girls, by becoming acquainted with the trends that have come into existence to fill those needs: the youth hostel movement, the Boys' State of the American Legion, the increased impetus toward summer camps and health education, the physical education program for modern living. I can serve my school by seeking out people wherever they live and obtaining from them a better understanding of the problems they face.

I can serve my school by guarding and improving my own health and vitality so that I may return refreshed and invigorated to the most important job on earth, that I may bring new inspiration and courage to my school and my community.

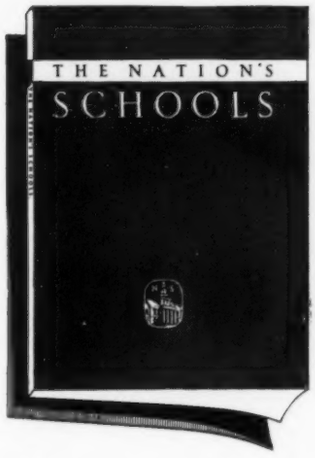
I can serve my school by studying the changing social concepts that are mapping out a new world, by trying to gain new insight into the lives of those who have the power to decide where the school is going.

To some fortunate souls, the summer vacation may be a time for rest. But for the teacher who recognizes that he is a guardian of a precious heritage, it is a time for preparing for the tremendous challenge that lies ahead. We must, each in his own way, strive to fit ourselves better to meet that challenge. Only thus do we interpret to those we would serve the importance of the work in which we and the public are mutually engaged.

• •

DEAR SUPERINTENDENT

DEAR Superintendent: I am sending you the photograph which you requested me to send with my application for a position. Unfortunately, I have no recent photo but this snapshot, taken by my sister 10 years ago, will probably satisfy. I am sorry that it is so hazy but it is all I have. The somewhat peculiar looking man on the right is Uncle John, who went to the insane hospital shortly after the picture was taken. In the center are papa and mama just after they had come from a swim in the lake. I am at the left of mama hiding behind our dog, Rover. I trust this will be satisfactory. Please mail the contract to the address I gave you last year.



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TNS

News in Review

Schools Granted Priority

The public schools have been included in the group of 26 essential industries and services to be granted priority in obtaining supplies for repair and maintenance by the Civilian Supply Allocation Division of the Office of Price Administration and Civilian Supply.

An allocation program was inaugurated on July 1 because growing demands on raw materials for the defense program and the priorities granted in connection with it made it difficult for manufacturers of repair and maintenance materials and equipment to fill their orders.

The effect of the program will be to assure continued operation of essential industries and services that might otherwise have been curtailed because of inability to obtain needed repair or maintenance supplies. The program will be administered by the Office of Production Management.

MEETINGS

N.E.A. Pledges Support

Members of the National Education Association meeting in Boston June 29 to July 3 pledged to President Roosevelt "all out" educational service for national defense job training in the present emergency. In a message to the President, the association reported that 1,500,000 persons had been trained for defense industries by the schools since the program was inaugurated July 1, 1940.

Officers elected for the coming year were as follows: president, Mrs. Myrtle Hooper Dahl, teacher, Minneapolis public schools; first vice president, A. Cline Flora, superintendent of schools, Columbia, S. C. B. F. Stanton, Aliance, Ohio, was reelected treasurer.

Conference Offers 16 Point Program

Representatives from all of the countries of the Western Hemisphere and a scattering few from some of the European and Asiastic countries that are now at war met as delegates to the eighth international conference of the New Education Fellowship at the University of Michigan during the week of July 6. Educators from all parts of the United States met with the foreign representatives.

The sessions were made colorful by special exhibits of children's books, children's art, North American Indian arts and crafts and health, sanitation and visual education materials. South American and Mexican dances and music were also featured.

The principal speakers included Horace M. Kallen, Clarence E. Streit, Waldo Frank, William Kilpatrick, Giselle Shaw, William Blatz, Jonathan Daniels, Paul Engle, Carl Sandburg, Noemy Da Sileira Rudolpher, Agustin Caballero, Calixto Gomez, Madeline Sylvain, Ofelia Mendoza, Rose Alschuler, Luis Padrino, the Honorable Hu Shih, Carlo Sforza, Luis Sanchez Ponton, Carlos Davila, Maurice Bonn, Spencer Miller, Eduard C. Lindeman, Laurin Zilliacus, Redvers R. Opie, B. K. Sandwell, Gustavo Otero and Boyd Bode.

The sessions ended with the adoption of a 16 point program for postwar educational reconstruction reaching "into every form of our economic, political and social life."

"It means creation of a free world to provide for useful work, happy family life, fruitful leisure and devotion," the committee's report stated. "Without careful planning and preparation of the educational element in this reconstruction, Europe will again collapse."

Four points were listed as "immediate and paramount" in the program, which the committee explained was designed "to avoid a repetition of mistakes of the last World War." These were:

1. To feed and care for all children of all nations, reconstruct schools and extend medical care.
2. To create a nucleus of people in each community of the defeated nations to direct reconstruction.
3. To plan, organize and finance the employment of youth in reconstruction.
4. To develop a comprehensive plan of education for children and adults.

GUIDANCE

Guidance Programs Under Fire

"You're wasting your time and ours" was the candidly spoken opinion of four high school pupils who participated in a forum on "Personal Requirements of Guidance Workers" at the fifth annual summer council on guidance and personnel work on the Evanston campus of Northwestern University July 7 to 12.

Unaware that they were speaking before deans, guidance teachers and counselors from all over the country, the pupils pointed out the shortcomings of vocational guidance programs and declared that they much preferred the advice of their homeroom teachers to that of guidance experts.

C. O. Arndt, assistant professor of education at Northwestern and head of the experimental New School of Evanston Township High School, then asked other pupils how they felt about the question. In general, they agreed with their spokesmen, adding that there is certainly a place for vocational guidance in the schools but that it should be conducted by homeroom teachers and not by "outsiders."

The sessions of the conference were devoted to new and improved methods for guidance in elementary, junior high and senior high schools.

INSTRUCTION

Latin America Study Urged

"Continued peace in the Western Hemisphere demands greater knowledge and understanding among the people of North and South America," stated John W. Studebaker, U. S. commissioner of education, in an appeal to the schools to enlarge the study of Latin American countries.

The adoption of three steps that would make possible a wide field of studies on Latin America in American schools this fall was urged by Commissioner Studebaker.

First, schools might form a unit on Latin America in social studies courses, which would be related to English, music and art. Second, teachers could prepare for such courses by special studies or travel in Latin America. Third, faculty committees should be set up to correlate arts and crafts, music, literature and other subjects with Latin American emphasis; to provide special assembly programs, and to use visual aids.

Band Clinic in Ann Arbor

Intensive study of new band compositions, participation in concerts, private instruction and practice on musical instruments were afforded the 100 high school band pupils who attended the sixth annual band clinic at Ann Arbor, Mich., July 5 to 27. The 1941 clinic was again under the direction of William D. Revelli, conductor of the University of Michigan bands and associate professor of wind instruments in the school of music. Guest conductors included Morton Gould, composer and conductor, New York City; Mark Hindsley, University of Illinois; Dale Harris, director of instrumental music, Pontiac public schools, and Cleo Fox, director of instrumental music, Kalamazoo public schools.

Schools Train for Defense

More than 1000 of the men employed on defense work at the RCA Manufacturing Company's plant at Camden,

N. J., have been trained in vocational schools or in vocational classes in public schools, it has been reported. New trainees are given an intensive vocational training course in the schools and those with the highest rating are sent to the RCA shop for six weeks' additional training before being assigned to production.

Industry Hires N.Y.A. Youth

Officials of the National Youth Administration have estimated that more than 310,000 young men and women who had been employed on N.Y.A. out-of-school projects had obtained jobs in private industry during the fiscal year which ended June 30. The figure was based on reports which showed that 151,949 N.Y.A. youths had been hired during the five months between December 1940 and May 1, 1941. Part of the credit for the placement of these young people, it was stated, belongs to the public vocational school systems, many of which cooperated with the N.Y.A. by providing related classroom training to project workers.

New N.Y.A. Defense Program

A "Youth Work Defense Program," which is designed to fit young people for jobs in defense industries and will supplement the present National Youth Administration out-of-school work program, was put into effect July 1. The program, for which Congress has appropriated $60,000,000, will be carried out jointly by the N.Y.A., the state employment services and the public vocational school systems. Its immediate objective is to fit approximately 360,000 young people for jobs in vital industries during the year July 1, 1941 to June 30, 1942.

HEALTH

Football Fatalities Decrease

A ten year review of football fatalities reveals that deaths "directly due to football" have decreased 75.7 per cent since 1931 and that there has been a further reduction in fatalities of 33.3 per cent since 1939. These figures, published by the Delaware State Department of Public Instruction in the *News Letter,* are based on the tenth annual survey of football fatalities by Dr. Floyd R. Eastwood, professor of physical education, Purdue University.

An analysis of the statistics by areas shows that sandlot fatalities have decreased 90 per cent since 1931; athletic club fatalities have dropped 66.6 per cent since 1931 and 85.7 per cent since 1935; the decrease in high school fatalities has been 58.3 per cent since 1931 and 66.6 per cent since the most hazardous year, 1936. Only one death that could be directly ascribed to football occurred among college students in 1940.

The *News Letter* made the following recommendations of procedures that should be followed in order to reduce the number of football deaths still further:

1. Warm-up periods before the start of practice, scrimmage or game and before the second half of a game. Three weeks or more preseason training. Liberal replacements in the fourth period. Exacting care of minor cuts and bruises. Skillful execution of tackling and blocking; training in being tackled.

2. Better equipment protection for the spine and internal organs.

3. A more thorough medical examination to include: heart examination before and after exercise; blood pressure reading before and after exercise; tuberculin tests and x-ray examinations for those who indicate a need; thorough examination for hernia and varicocele, and more thorough examination by the physician before returning to active participation.

4. A more definite emphasis on the "fast whistle" and closer calling of penalties for "piling up."

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You get *lasting* cleanliness when you refinish your floors with Seal-O-San. For Seal-O-San fills and *seals* all cracks and cells that harbor germ-laden dirt. It leaves a beautiful, wear-resisting finish that prevents dirt from piercing the surface—a finish unmarred by traffic lanes . . . unharmed by chemicals or ink . . . easily kept clean with a dry mop.

Scrubbed floors that *look clean* can become a menace to the health of pupils who come in contact with the unclean surface. To prevent this danger, and to be certain that *your* wood floors are *continuously* clean, refinish with Seal-O-San—now!

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PERFECT SEAL AND FINISH FOR WOOD FLOORS

Ultraviolet Rays Check Epidemic

The feasibility of using ultraviolet rays to check the spread of communicable diseases in schools was reported on at the recent convention of the American Medical Association by Drs. William F. and Mildred Wells of the University of Pennsylvania School of Medicine.

Experiments conducted in three Pennsylvania schools revealed that during a measles epidemic the primary grades that were protected by ultraviolet irradiation of the air reported only a third as many cases as the unprotected secondary grades. This was a reversal of the usual trend inasmuch as there are ordinarily three times as many cases in the lower grades as in the upper classes, the scientists stated.

Simple indirect ultraviolet fixtures were used in the experiments. They were hung low and operated continuously during school hours, sending out rays that killed air-borne bacteria.

RADIO

Rules for Use of School Radio

Because of the increasing importance of radio as a factor in education and because it can readily be used as a means of propaganda, the New York City board of education has issued a bulletin listing regulations governing the use of radio in the schools.

In developing radio programs, principals must have a number of important objectives in mind, the bulletin states. First, they should see to it that all programs to which pupils listen in school have intrinsic educational value and conform to high standards of good taste. Second, they should safeguard the pupils from being influenced by undesirable programs by teaching them to evaluate programs correctly.

It is suggested that the school principal organize a committee of teachers to select proper programs and to disseminate to the faculty information in regard to them. At regular intervals the committee should prepare a schedule of recommended broadcasts, indicating the age groups and the subjects to which they are particularly related. Programs that are unfitted to school use should be investigated and dropped from the schedule.

Teachers whose classes hear radio broadcasts should make a weekly report which includes the station, time of broadcast and topic: the class that heard the broadcast, and an evaluation of the program.

Radio's Role in Defense

The principal subjects for consideration at the fifth School Broadcast Conference to be held in Chicago, December 3 to 5, will be national defense and the strengthening of our cultural relationships with Pan-American countries. One of the greatest problems of national defense, it was stated by Harold Kent, executive chairman of the conference, is to train the youth of America in the fundamental concepts on which our democracy is founded and radio seems to be the ideal medium for bringing these truths to the great audience of school children in America.

Four Programs for Defense

Four new programs in the interests of national defense and Pan-American unity have recently been inaugurated by Columbia Broadcasting System. "You Decide," broadcast from 1 to 1:30 p.m. on Sundays, dramatizes for teen age children the blessings of the democratic way of life.

Another Sunday program, from 4:30 to 5 p.m., is "The Spirit of '41," which is devoted to the Army, Navy and Marine Corps and each week dramatizes the history of one branch of these services.

On Wednesday evenings, from 9 to 10 p.m., is broadcast the "Millions for Defense" series, which is designed to promote the sale of the new defense bonds.

"Calling Pan-America" brings a program of the music, culture and entertainment of one of the Latin American countries to the United States each week at 4 p.m. on Saturdays. All programs are broadcast on Eastern daylight saving time.

Coming Meetings

Sept. 29-Oct. 3—National Recreation Congress, Baltimore, Md.

Oct. 9-11—Utah Education Association, Salt Lake City.

Oct. 13-16—National Association of Public School Business Officials, Atlantic City, N. J.

Oct. 16-18—Wyoming Education Association, Cheyenne.

Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.

Oct. 22-25—New Mexico Educational Association, Albuquerque.

Oct. 23-24—Minnesota Education Association, Municipal Auditorium, St. Paul.

Oct. 23-24—New Hampshire State Teachers Association, Nashua.

Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.

Oct. 24-25—Maryland State Teachers Association, Baltimore.

Oct. 29-31—West Virginia State Education Association, Charleston.

Oct. 29-31—North Dakota Education Association, Minot.

Oct. 29-31—Maine Teachers Association, Bangor.

Oct. 29-Nov. 1—National School Cafeteria Association, San Antonio, Texas.

Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.

Nov. 6-8—Conference of Food Service Directors, New York City.

Nov. 6-8—Iowa State Teachers Association, Des Moines.

Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.

Nov. 7-9—New Jersey Education Association, Atlantic City.

Nov. 10-13—National Council on Schoolhouse Construction, Cavalier Hotel, Virginia Beach, Va.

Nov. 13-15—Arizona Education Association, Phoenix.

Nov. 18-21—Virginia Education Association, Richmond.

Nov. 20-22—Texas State Teachers Association, Houston.

Nov. 26-29—Missouri State Teachers Association, St. Louis.

Dec. 29-31—Pennsylvania State Education Association, Harrisburg.

Dec. 29-31—Illinois Education Association, Chicago.

Feb. 20-21—National Advisory Council on School Building Problems, St. Francis Hotel, San Francisco.

Feb. 21-26—American Association of School Administrators, San Francisco.

April 8-10—Inland Empire Education Association, Spokane, Wash.

PUBLICATIONS

Library Laws Summarized

A summary of school library legislation for all states has been compiled by the U. S. Office of Education in a bulletin entitled "Laws Affecting School Libraries." The bulletin is divided into two sections: part 1 summarizes school library legislation for all states and part 2 contains a digest of such legislation in the individual states.

For Better School Libraries

For the purpose of "throwing new light on the old question of school and public library cooperation in school library service," a joint committee of the National Education Association and the American Library Association has issued a report, "Schools and Public Libraries," based on a study of 89 communities. The report includes a statement of the principles of school library service and describes school and public library relationships in the communities that were used as the basis of the study. It is designed as a guide for teachers, librarians and administrators in building a sound plan for school library organization.

Rat Feeding Experiment

A booklet entitled "The Ups and Downs of Brother Rat," telling how to conduct a simple, inexpensive and practical rat feeding experiment, has recently been made available by the Wisconsin Alumni Research Foundation, Madison. Directions are simply and clearly phrased so that any science, physiology, hygiene, nutrition or health class can conduct the project. A copy will be sent free to any class or organization that wishes to make the experiment.

"Plays" for Young People

A new drama magazine called *Plays* will be issued monthly from September through June. Each issue of the magazine will contain a minimum of 15 new plays, graded for different age levels; they will be designed to teach elementary

school children factual material and to give them an intelligent approach to the social problems encountered in everyday life by means of active participation in plays.

LEGISLATION

Textbook Bill Defeated

An attempt to amend the Texas constitution during the 1941 session of the assembly in order to provide free textbooks for nonpublic schools and orphanages has failed. This is the third attempt within recent years to amend the state constitution for this purpose. In 1935, the people of Texas turned down an amendment after it had passed both houses of the legislature and had been submitted to them in a referendum. Still later another attempt died in the lower house when it failed to obtain the necessary votes.

VISUAL EDUCATION

Film Teaches Flying

A two reel instructional sound film on the fundamentals of flying has recently been made available to educational institutions by the University of Chicago. The film was produced by Erpi Classroom Films of Long Island, N. Y., under the direction of Dr. Reginald J. Stephenson, assistant professor of physics of the university, and Lieut. Walter T. Brownell, director of the university's pilot training program.

The first reel on the "Theory of Flight" covers the forces involved in a heavier-than-air machine and shows how these forces and the motions of a plane are controlled by elevators, ailerons and rudder.

Take-off, landing, cruising, stalls and spins and the operation of the controls during these maneuvers are depicted in the second reel of the film, which deals with problems of flight.

Films in Review

DIGESTION OF FOODS: 16 *mm., sound.* 400 *feet.* 1 *reel.* 12 *minutes. Erpi Classroom Films, Inc. Subject: biology or physiology. Grades, later elementary or junior high school. Rating A.*

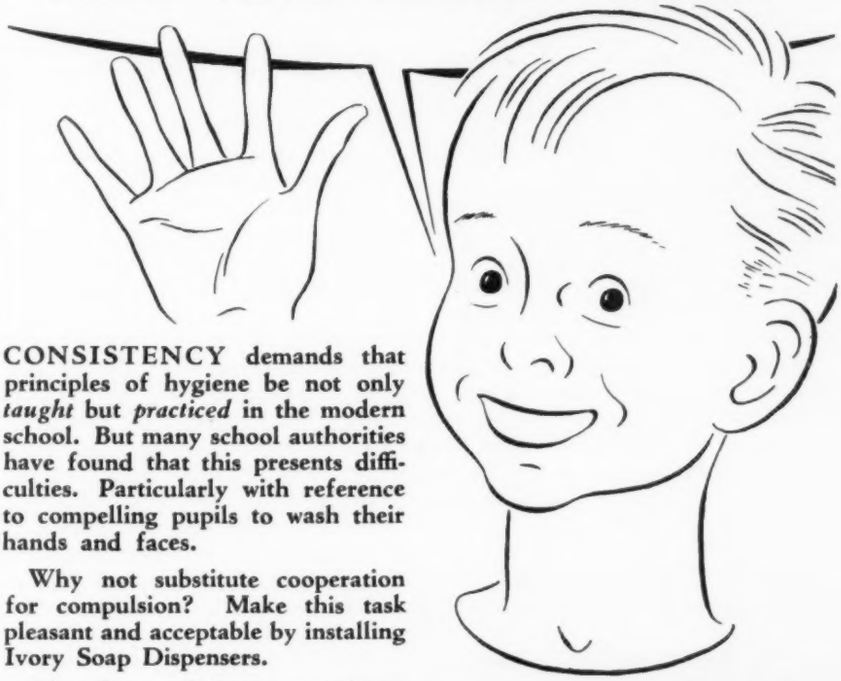
The digestive system and the mechanism of digestion, such as mastication, swallowing and peristalsis in both the intestines and the stomach, are shown by means of animated drawings. One can see clearly the movement of the food through the digestive tract and its absorption by the villi. The flow of blood is shown so that one can see the relation of the blood to the digestive process.

Various types of secretions that aid in digestion, such as the saliva, gastric juice and ptyalin, are described, together with their action on the food. Chemical tests are made to show how these substances break the food down into simpler chemical substances before it is assimilated. The digestion of fats, carbohydrates and proteins is illustrated. Animated photography is often used to clarify these physiological processes. This film is excellent. The photography is clear and well focused. The subject matter is accurately presented and the motion is necessary for a thorough explanation. This film will be an excellent aid to the teaching of this subject.—*Reviewed by* WILLIAM O. MAYROSE.

SOME SEASHORE ANIMALS. 16 *mm., silent.* 250 *feet.* ¾ *reel.* 8 *minutes. Eastman Teaching Films, Inc. Subject: science, biology, nature study. Grades* 6 *to* 12. *Rating A.*

This is silent film of high photographic value, portraying an abundance

WHO MINDS WASHING FACE AND HANDS NOW?



CONSISTENCY demands that principles of hygiene be not only *taught* but *practiced* in the modern school. But many school authorities have found that this presents difficulties. Particularly with reference to compelling pupils to wash their hands and faces.

Why not substitute cooperation for compulsion? Make this task pleasant and acceptable by installing Ivory Soap Dispensers.

The Ivory Dispenser delivers genuine Ivory Soap—a soap which both children and adults like because of its purity, rich lather, and gentleness. A soap, in fact, which makes the washing of faces and hands both safe and pleasant.

Ivory Dispensers are low in first cost and in upkeep. They are efficient and attractive. An illustrated folder tells all about them . . . write for it.

IVORY SOAP DISPENSERS

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of the various types of marine life that live along the seashore.

The introductory scenes show a collector as he walks along the shore turning over stones that reveal many small animals clinging to them. High motion utility is revealed as the water washes the shore and then recedes carrying the animals along with it. We then see the sea anemones, flower-like in form, as their tentacles wave about to bring the current of the water from which they derive their food and air supply to them. A close-up reveals the tentacles and the mouth of the animal. Many other varieties of marine life, such as the sea feather, feather duster or marine tube worm, sea urchins, starfish and shrimps, are identified.

Pupils should be especially interested in the film as a phase of life with which they are unfamiliar and which brings forth for them a feeling of wonder and strangeness. It is valuable for nature study in grades 6 through 9, if previous preparation is given. It is excellent for high school pupils. — *Reviewed by* MARGARET O'GRADY.

Film Releases

"Yellowstone," "Northwest Mountains," "Trip Through Utah," "Mount Rushmore National Monument," "Colorful California," "Grand Canyon"—Six full-color motion pictures showing the national parks. 16 mm., silent, color. The films can be rented by amateur photographers among the teaching profession who are planning to make their own movies in order to get tips on various problems of color photography. Bell and Howell Company, 1801 Larchmont Avenue, Chicago.

Aviation Engine: Disassembly and Inspection—A training aid designed for use where an actual airplane engine is not available. The picture introduces the various major units that make up the radial type of engine, identifies the units and indicates the functions. It also identifies the subassembly units and illustrates methods of locating cracks in parts of the engine. Produced in cooperation with the Missouri Aviation Institute. 16 mm., silent and 16 mm., sound. 2 reels. Garrison Films, 1600 Broadway, New York City.

Early Settlers of New England—The beginnings of American democracy are portrayed in this film of the life of Salem pioneers in the early 1620's. The type of people, their dependence on land and sea for food, the division of labor and the care of the sick are among the problems portrayed in the film. 16 mm., sound. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

World in Flames — Full length documentary feature describing world events of the last ten years that lead up to the present crisis. Films, Incorporated, 330 West Forty-Second Street, New York City.

NAMES IN NEWS

Superintendents

CHARLES OTTERMANN, assistant superintendent in charge of high schools, Cincinnati, has been named principal of Hughes High School, Cincinnati, succeeding CHARLES M. MERRY, the board of education announced. At the same time, DR. GEORGE H. REAVIS, formerly director of curriculum in Cincinnati, was given the newly created post of assistant superintendent in charge of instruction.

HOMER DAVIS has been released from his position as superintendent at Twin Falls, Ida., to accept the position of assistant superintendent of schools in charge of business at Seattle. He succeeds CLYDE G. CAMPBELL who died May 15.

WORTH MCCLURE, superintendent of Seattle public schools, has been granted six months' leave of absence to attend Columbia University where he is studying for the degree of doctor of philosophy.

PROF. W. O. MOORE has resigned as superintendent of schools, Upper Sandusky, Ohio, a position he has held since 1923.

WILLARD J. GRAFFE of Marshall, Mo., has been chosen superintendent of schools at Independence, Kan. He will succeed J. H. CLEMENT, who has held the position for fifteen years.

LEIF S. HARBO has been named superintendent of schools at Red Wing, Minn., to succeed G. V. KINNEY, whose resignation will take effect on August 1.

LAWRENCE B. CROCKER has been selected as principal of Booker T. Washington High School, New Orleans. He will assume his duties when the school opens in September. Mr. Crocker is at present head of J. W. Hoffman Negro School, New Orleans, and has been connected with the city's public school system for twenty-five years.

PROF. JAMES CODDING, principal of Central Rural School at Keene Valley, N. Y., was elected district superintendent of schools to succeed MRS. NETTIE FERRYALL.

J. FRANK TAYLOR, superintendent of schools at Dresden, Tenn., recently submitted his resignation. He has accepted a similar position in Martin City, Tenn., succeeding SPENCER R. TAYLOR.

PROF. OWEN MOORE has resigned as superintendent of Ossian High School, Ossian, Ind. He has accepted a position as principal of the Chester School near North Manchester, Ind.

CURTIS CHRISTIAN, superintendent of schools, Pleasant Grove, Okla., will take over the superintendency of schools at Carr City, Okla., on July 1, succeeding E. W. HICKMAN.

G. EVERETT PAGE JR., principal of Garland Street Junior High School, Bangor, Me., resigned at the end of the school year to become superintendent of School Union 84, which includes the school systems of Dover-Foxcroft, Sebec, Bowerbank and Atkinson.

HARRIETT O'BRIEN has been appointed school director for Hempstead, N. Y., to succeed OLIVE I. MACGOVERN, who resigned recently because of ill health.

B. B. COVEY, superintendent of schools, Bronte, Tex., submitted his resignation recently.

S. DEBORD, superintendent of schools at Schulenburg, Tex., has announced his resignation.

PERLEY TURNER, headmaster of Edward Little High School, Lewiston, Me., resigned at the close of the school year to become superintendent of schools at Sanford, Me.

H. M. SHAEFFER has been named superintendent of schools of Montpelier, Ohio. He has been principal of the Montpelier High School for fourteen years. WILLIAM A. HOWARD, coach and athletics director of Troy High School, Troy, Ohio, will succeed Mr. Shaeffer as principal.

D. C. EGGER has been appointed superintendent of schools of Holmes County, Ohio, to succeed J. F. JAMESON.

CHARLES S. HICK, superintendent of schools of the second supervisory district in Sullivan County, New York, retires in August after thirty years' service.

County Superintendents

FORREST HUMMEL, who has served as principal of Washington Township High School, Logansport, Ind., for the last ten years, has been elected county superintendent of schools, Cass County, Indiana.

Principals

DR. J. DAN HULL, principal of the senior high school, Springfield, Mo., for the last fifteen years, was named successor to GEORGE BUCK, retiring principal of Shortridge High School, Indianapolis.

FRED C. MCCOMBS, principal of the Cotati School, Cotati, Calif., for the last two years, resigned that position on July 1 to become principal of an elementary school at Santa Cruz, Calif.

JAMES H. WILLIAMS, for four and a half years principal and assistant super-

intendent of Sweetwater High School, Sweetwater, Tex., resigned to accept an administrative post in the school system of El Paso, Tex.

LEROY L. SHINPAUGH, former principal of the high school at Sheldon, Ill., has been appointed principal of Gridley High School, Gridley, Ill.

R. A. QUELLE, principal of Garden County High School, Oshkosh, Neb., was recently elected superintendent of schools to succeed W. L. NICHOLAS.

ERNEST W. OLIVER, principal of Los Angeles High School, Los Angeles, retired at the close of the school year. He had been head of the school for sixteen years. PAUL EDWARD WEBB, principal of San Fernando High School, was named successor to Mr. Oliver.

ALICE JEFFORDS has been appointed principal of the New Franklin School, Franklin, N. H. She was formerly principal of the junior high school in Franklin.

WALLACE J. ANDREWS, superintendent of schools, Ulster County, New York, retired recently after thirty-five years as head of the school system.

D. GAIL BRUMWELL has been elected principal of Elsinore Union High School, Elsinore, Calif., succeeding O. P. HORNADAY, who has resigned to accept the superintendency of the Palo Verde Valley School District, Blythe, Calif.

C. E. ROSE retired June 30 after twenty-one years as superintendent of schools at Tucson, Ariz.

EMILY P. ROCKWOOD, for the last thirteen years principal of Haddon Heights High School, Camden, N. J., retired at the close of the school year because of ill health.

GEORGE NEYMAN PORTER has retired as principal of Garfield High School, Seattle, after serving twenty-one years in that position.

ROBERT T. LAING, supervising principal of Knox Borough schools, Knox, Pa., has been elected to the principalship of Kittaning High School, Kittaning, Pa.

FRED N. JOHNSTON, formerly assistant principal of the senior high school, Clinton, Iowa, has been made principal of the school.

FRANK D. SCOTT, principal of Flemingsburg High School, Flemingsburg, Ky., has been elected principal of the new Fleming County High School, which will be ready for occupancy this fall.

CLIFTON SMITH, athletics coach at Bradley High School, Cleveland, Tenn., has been elected principal of the school, succeeding G. A. TRIP.

MILTON W. BROWN, principal of Frewsburg High School, Frewsburg, N. Y., resigned at the end of the school year to accept a position as principal of the senior high school at Lancaster, N. Y.

GEORGE A. BERGFIELD, principal of the high school at Douglas, Ariz., for the last twelve years, who is a major in the Army Reserve Corps, has been called to active duty. ARTHUR P. PRESCOTT served as substitute principal during the remainder of the school year.

LEO J. FUCHS, principal of School 3, Scotch Plains, N. J., has been appointed to fill the vacancy caused by the resignation of MARION EGAN, principal of School 4. He will assume his new duties next fall.

Private Schools

CHARLES C. BUELL, former member of the teaching staff of Milton Academy, Milton, Mass., has assumed the duties of headmaster of Greenwich Country Day School, Greenwich, N. Y.

In the Colleges

DR. JULIUS SEELYE BIXLER, professor of theology at Harvard University, has been named to succeed DR. FRANKLIN W. JOHNSON as president of Colby College, Waterville, Neb. Doctor Bixler will take over the presidency of the college in June 1942.

HELEN HALL MORELAND, dean of women at Stephens College, has accepted the appointment as dean of women at the University of Southern California. Miss Moreland succeeds DR. MARY SINCLAIR CRAWFORD.

DR. HENRY H. HILL, assistant superintendent of schools, St. Louis, has been named dean of the University of Kentucky.

Miscellaneous

DON E. MCGRATH, superintendent of school buildings at Danville, Ill., has been appointed to a similar position in Pontiac, Mich.

PROF. NELSON B. HENRY of the University of Chicago has been named secretary of the National Society for the Study of Education, succeeding DR. GUY MONTROSE WHIPPLE.

DR. M. M. CHAMBERS, a member of the staff of the American Youth Commission of the American Council on Education from 1935 to July 1941, was recently appointed chief of the student project planning section in the division of student work of the National Youth Administration, with offices at 2145 C. St., N. W., Washington, D. C.

JENNY TUCKER BAKER, pioneer Los Angeles County teacher and clubwoman, was honored on her seventy-fifth birthday by having the new modernistic school in the Mountain View District near El Monte, Calif., dedicated to her. Mrs. Baker climaxed a long period of service as teacher and administrator by serving for eighteen years as a member of the Los Angeles County board of education.

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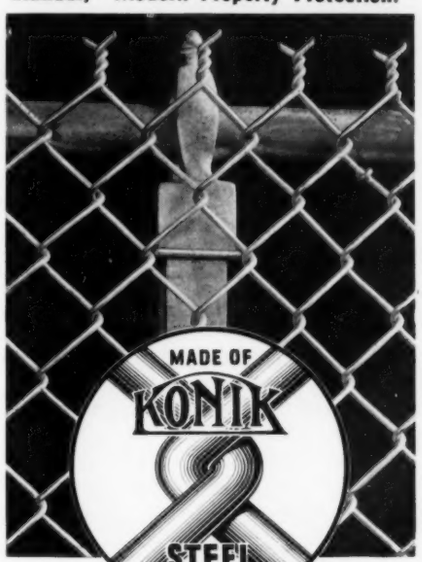

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The Bookshelf

THREE HUNDRED GIFTED CHILDREN. *By Merle R. Sumption. Yonkers-on-Hudson, N. Y.: World Book Company,* 1941. *Pp.* xviii+235.

THE NEW PROMETHEUS. *By Lyman Bryson. New York: The Macmillan Company,* 1941. *Pp.* ix+107. $1.

PERSONALITY AND LIFE. *By Louis P. Thorpe. New York. Longmans, Green and Company,* 1941. *Pp.* xiii+266. $2.50.

GREECE AND THE GREEKS. *By Walter Miller. New York: The Macmillan Company,* 1941. *Pp.* xiv+508. $3.

WRITE *Health and Economy* INTO YOUR SCHOOL SPECIFICATIONS

Probably no single piece of equipment has been more thoroughly studied, tried and approved by architects, educators, and public health officials than the Spencer Central Vacuum Cleaning System.

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CURRENT PRACTICES IN INSTITUTIONAL TEACHER PLACEMENT. *By Earl W. Anderson and Others. Washington, D. C.: National Institutional Teacher Placement Association,* 1941. *Pp.* xi+186.

EDUCATION ON AN INTERNATIONAL SCALE. *By George W. Gray. New York: Harcourt, Brace and Company,* 1941. *Pp.* xiii+114. $2.

WHAT THE NEW CENSUS MEANS. *By Stuart Chase.* 30 *Rockefeller Plaza, New York: Public Affairs Committee, Inc.,* 1941. *Pp.* 30. $0.10 *(Paper Cover).*

ADMINISTERING VOCATIONAL EDUCATION. *By Walter H. Magill. Minneapolis: Educational Publishers, Inc.,* 1941. *Pp.* xii+118.

PSYCHOLOGY IN EDUCATION. *By Daniel Starch, Hazel M. Stanton and Wilhelmine Koerth. New York: D. Appleton-Century Company,* 1941. *Pp.* x+722. $3.

COMMUNITY ORGANIZATION FOR HEALTH EDUCATION. *By Clair E. Turner and Others. New York: American Public Health Association,* 1941. *Pp.* ix+120. $0.09 *(Paper Cover).*

EDUCATION FOR FAMILY LIFE. *Nineteenth Yearbook of the American Association of School Administrators. Washington, D. C.: National Education Association,* 1941. *Pp.* 368. $2.

THE BOOKLIST. *The Dangers to Democracy. Vol.* 37, *No.* 8. *Chicago: American Library Association,* 1941. $0.25 *Each;* 10 *Copies,* $1; 25, $2; 50, $3; 100, $5.

GUIDANCE IN DEMOCRATIC LIVING. *By Arthur D. Hollingshead. New York: D. Appleton-Century Company,* 1941. *Pp.* xiv+260. $1.80.

PRINCIPLES AND TECHNIQUES OF VOCATIONAL GUIDANCE. *By George E. Myers. New York: McGraw-Hill Book Company,* 1941. *Pp.* xii+377. $3.

Textual

MODERN-LIFE SPELLER: NEW EDITION. *By Fred C. Ayer, E. E. Oberholtzer and Clifford Woody. Second and Third Grades,* $0.40 *Each; Fourth Grade Through Eighth Grade,* $0.44 *Each. Workbooks, Second Through Eighth Grades,* $0.24 *Each. Yonkers-on-Hudson, N. Y.: World Book Company,* 1941.

WORKING WITH ENGLISH. *Ninth-Grade Workbook. Pp.* viii+162. $0.48. OUR ENGLISH POWER GROWS UP. *Tenth-Grade Workbook. Pp.* viii+183. $0.52. *By Maurice C. Lipman and William H. Johnson. New York: The Macmillan Company,* 1941.

VISUAL AND TEACHING AIDS. *In the Realm of Biology. Pp.* 21. $0.50. *Safety Education. Pp.* 6. $0.15. *By Lili Heimers and Others. Montclair, N. J.: New Jersey State Teachers College.*

WHAT'S NEW

Peg Board Climbing Device

For the development of muscles and general health improvement, J. E. Porter Corporation has recently marketed a climbing device that, in principle, affords exercise resembling rope climbing. The unit is a 12 foot by 12 inch hardwood board clamped to a steel pipe that is laid upright in concrete. Two rows of holes are drilled in the board. The holes are 5 inches apart vertically and the rows are 9 inches apart. The child pulls himself up by inserting hardwood pegs in the holes each time to secure a new grip. At the top of the peg board is a bell that the child rings when he reaches the top. Each peg will safely hold a load of 450 pounds. The wood is treated to prevent warping, shrinkage or splintering.—J. E. Porter Corporation, Ottawa, Ill.

• *When inquiring, refer to* **NS136**

Rules for Fighting Fires

What to do in case of fire is answered in graphic form on a new chart that gives concise instructions regarding the use of fire extinguishers on various types of fires. This poster gives basic fire fighting facts on carbon dioxide, foam, carbon tetrachloride and water extinguishers and tells in which instances each should or should not be used. Copies are available free on request.—Walter Kidde & Company, West St., Bloomfield, N. J.

• *When inquiring, refer to* **NS137**

Bleachers Protect Players

In order to guard basketball players against injury, "vital zone" protection has been added to Horn folding bleachers. According to the manufacturer, the sloping front of the bleachers protects players from injury because the upper part of the body does not come into contact with the wall. No mats or padding is needed against the wall line.—Horn Manufacturing Co., Fort Dodge, Iowa.

• *When inquiring, refer to* **NS138**

Check for Interior Doors

A novel feature of the Rixson Uni-Check automatic closer for interior doors is the method employed to anchor it to masonry floors. The Uni-Check can be set into virtually any type of floor, wood or masonry. The unit permits a standard single acting door to swing open 180 degrees and to clear a 1½ inch trim. At 160 degrees the check holds the door open automatically.—Oscar C. Rixson Co., 4450 Carroll Ave., Chicago, Ill.

• *When inquiring, refer to* **NS139**

Hearing Defects Diagnosed

Swift, accurate diagnosis of hearing defects is assured with the Western Electric 6B audiometer. The device indicates the special characteristics, as well as the extent, of hearing loss. Hearing acuity is measured by determining the pupil's ability to hear a tone of controlled intensity and pitch in a telephone receiver. Both bone and air conduction acuity can be tested. The instrument is said to be extremely simple to operate. It operates on either A.C. or D.C. power outlets of 110 or 120 volts and no battery is necessary.—Western Electric Co., 195 Broadway, New York, N. Y.

• *When inquiring, refer to* **NS140**

Fluorescent Light Equipment

New combination lampholders, starter sockets and starters for T-17 100 watt fluorescent lamps have been announced by General Electric. The new equipment is designed to provide easier replacement and greater holding power. The new combination lampholder and inverted starter socket permits starters to be replaced without removing the lamps from the fixtures.—General Electric Appliance and Merchandise Department, Bridgeport, Conn.

• *When inquiring, refer to* **NS141**

Table Folds Without Struggle

Three outstanding features contribute to the well-deserved popularity of the new Howe folding tables, the manufacturer asserts. One great convenience is the ease of operation. Moving any one leg of the table locks all four into open position or closes them into a compact space for storing. Strength and rigidity are achieved through the steel chassis

and the riveted, spot welded construction. The tables are clean and sanitary for cafeteria use. Tops come in plywood, Masonite and linoleum, with metal edges for protection.—Howe Folding Furniture Co., Inc., 1 Park Ave., New York, N. Y.

• *When inquiring, refer to* **NS142**

Phonograph Pickup Arm

A point to consider is the low-pressure astatic pickup arm for phonographs recently announced by the Astatic Microphone Laboratory. A rounded sapphire point on the pickup arm obviates the necessity for changing needles, prolongs

the life of the records and improves the quality of reproduction performance. The distortion of records because of wear is said to be practically eliminated. The pickup arm is designed specifically for low-pressure service. Stylus pressure on the record is only one ounce.—Astatic Microphone Laboratory, Inc., Youngstown, Ohio.

• *When inquiring, refer to* **NS143**

Address manufacturers for further information and prices—or use Readers' Service blank on page 85.

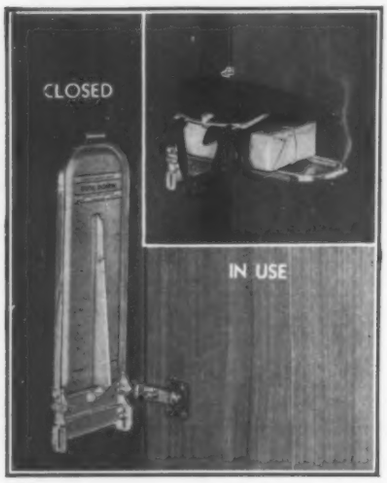
Settling the Dust Question

Playgrounds, running tracks, baseball diamonds and tennis courts need not be miniature dustbowls even in hot, dry weather. The annoyance and health hazard of dust can be overcome by the use of Solvay calcium chloride, the manufacturer states. The calcium chloride comes in small white flakes that are spread evenly over the surface to be treated. Upon exposure they absorb moisture from the air and dissolve it into a clear, colorless solution that penetrates from 3 to 5 inches into the ground. In addition, the solution serves as a weed deterrent.—Solvay Sales Corporation, 40 Rector St., New York, N. Y.

• *When inquiring, refer to* **NS144**

Shelf for Toilet Booths

A practical convenience for washrooms is the utility shelf recently introduced by American Dispenser Company to solve the toilet booth problem of a clean, reserved space for purses or books. The shelf pulls down when the door of the booth is closed and folds upright when



the door is opened. Nothing can be stolen from the shelf and nothing can be forgotten because all articles must be removed before the shelf can be raised and the door opened. It is made of 18 gauge steel with satin chrome finish and is designed to carry a weight of more than 200 pounds.—American Dispenser Company, 215 4th Ave., New York, N. Y.

• *When inquiring, refer to* **NS145**

Seating Equipment

Chair, desk and book compartment are combined in desk model 292, recently introduced by the Irwin Seating Company. The desk is adjustable for various heights and the plywood top has rounded corners to provide easy ingress

and egress. Two angle steel frames of one piece construction support the plywood seat and the book compartment on all four sides.—Irwin Seating Co., Grand Rapids, Mich.

• *When inquiring, refer to* **NS146**

Cleans Cramped Quarters

Portable but powerful is the new G-E lightweight Master-Vac heavy duty vacuum cleaner. The new cleaner is said to have the same suction power and quiet operation as the de luxe model but its smaller size makes it more convenient for use between auditorium seats and similar cramped spaces. It is equipped with ball-bearing swivel casters and a swivel handle for ease in moving and carrying. Standard accessories include a 10 foot hose, a 52 inch extension handle, a carpet nozzle, an upholstery brush, an upholstery nozzle and a blowing tool.—General Electric Co., Bridgeport, Conn.

• *When inquiring, refer to* **NS148**

Desk Turns Radio

Any school boy would be happy to stay at his desk if it had all of the fascinating instruments on it that radio engineers have installed on one of the new American Seating Company desks. The design of the new model was found to be practically made to order as a radio control unit so one of them has been installed in the studios of the "News Room of the Air," complete with microphones, loud-speakers and push buttons, and has become a part of radio's "magic carpet."—American Seating Company, Grand Rapids, Mich.

• *When inquiring, refer to* **NS149**

Odors Quickly Destroyed

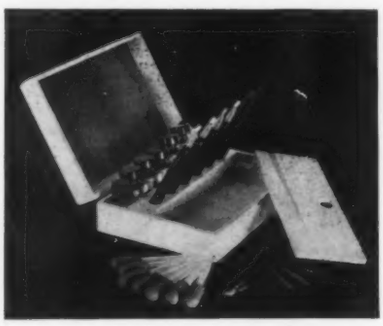
Objectionable odors are completely destroyed, not just covered up, by Renovet, a new deodorant. The manufacturer calls it a streamlined air conditioner that is easy and economical to use.

Sprayed toward the ceiling, Renovet gives off a slight, pleasant scent for a few minutes and then all odors, including the scent of Renovet, disappear completely, it is claimed. A few ounces of the solution are sufficient to destroy odors in a ordinary sized room. It is entirely harmless and will not stain or damage fabrics.—Consolidated Laboratories, Division of Consolidated Chemical Laboratories, Inc., St. Louis, Mo.

• *When inquiring, refer to* **NS150**

Ink for Art Work

"One stroke and it's dry" is the manufacturer's claim for "Dri-ink," a new quick drying writing fluid. The ink is used with a Floquil pen for drawing, lettering and labeling. The Floquil can be equipped with nibs of various shapes through which the ink flows continuously when the pen is in writing position. Dri-ink comes in the six primary



colors, which can be mixed and thinned to produce the desired shade. It can be used on such materials as wood, cellophane and textiles, in addition to art papers and cardboards.—Bacon and Vincent Co., Inc., 1 Ellicott St., Buffalo, N. Y.

• *When inquiring, refer to* **NS151**

Soluble Cleansing Agent

When an all-soluble cleaner is desired for cleaning either floor or wall surfaces, J. B. Ford Company recommends the new Wyandotte F-100. The product is said to be especially effective for cleaning wood floors where it is difficult, or impossible, to pick up the insoluble part of a cleaner after the mopping or scrubbing has been done.

F-100 dissolves completely in water and leaves no film or white deposit. When used in the amounts recommended, it will not harm paint or enamel. It can be obtained in 75 or 250 pound drums.—J. B. Ford Sales Co., Wyandotte, Mich.

• *When inquiring, refer to* **NS152**

Photographs Eye Movements

Educators and ophthalmologists are assisted in diagnosing defective reading habits—a major cause of pupil failure—with the new ophthalmograph developed by the American Optical Company. The eye-movement camera automatically produces within itself a fully developed, identified film eight minutes after the reading test. The film reflects the actual behavior of the eyes while reading.—American Optical Company, Southbridge, Mass.

• *When inquiring, refer to* **NS153**

Economical Bench Planer

"Built to last for a lifetime of efficient performance and economical operation" is what the Kneisley Electric Company says about its new precision-built bench planer. The machine is designed for use as a thickness planer and should not be confused with a jointer, the maker warns. It can be used on all work stock regardless of texture, on inlay or built-up work, for resurfacing raised edges on glued-up work and for planing such woods as figured mahogany, birch and cherry. Safety is featured in the machine and it is said to be practically impossible for the operator to place his hands in a position in which they could be damaged by the cutter-head or rolls.—Kneisley Electric Co., Toledo, Ohio.

• *When inquiring, refer to* **NS154**

Corrosion-Resistant Paint

Tygon paint is not impressed by the action of chemicals and corrosives, the manufacturer of the new corrosion-resisting paint asserts. It will withstand the action of acids, salts and alkalies, including nitric, hydrofluoric, hydrochloric, sulfuric and chromic acids, but not formic and acetic acids. Some of the principal applications of Tygon are for painting chemical and process equipment; for painting laboratory walls and tables; as a coating over building steel, and as a floor paint for which a special grade is available. The paint may be brushed, sprayed or baked and is available in a wide range of colors, including black, white and clear.—United States Stoneware Co., 60 E. 42nd St., New York, N. Y.

• *When inquiring, refer to* **NS155**

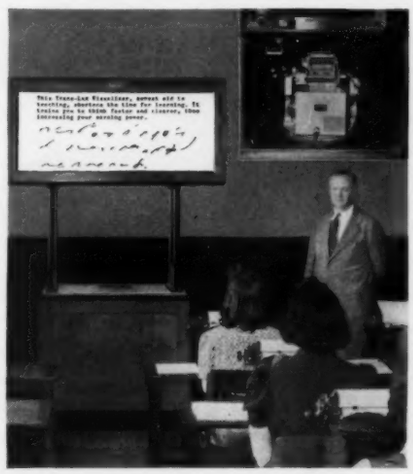
Condensation Prevented

The first cost is the last cost of Insulmat, a new spray-on plastic cork material that is said to protect metal surfaces, such as bus bodies, against condensation drip. The new material can be sprayed onto any metal surfaces and forms a protective coating against rust, corrosion and abrasion, ensuring longer life to the metal. It is self-bonding and requires no priming coat, adhesive or supports. It can also be applied to air ducts and water pipes to prevent them from dripping.—J. W. Mortell Company, Kankakee, Ill.

• *When inquiring, refer to* **NS156**

Learning by Sight

Visual education teaches concentration, according to the manufacturer of the Trans-Lux Visualizer, a new mechanical aid to teaching. The device uses a 5½ inch wide cellophane web on which the text material is first typed or written by hand. The web is wound on a supply reel and is then fed through the projection field at the desired rate, which may be increased or decreased at will by remote control. Projected material can be seen from a distance of from 30 to 40 feet in a daylighted classroom. The visualizer operates on 110 or 120 volts,



60 cycle, A.C. The mechanism is contained in a cabinet that measures about 92 inches high and 59 inches wide. All operating mechanism except the remote control is located in the base of the cabinet.—Trans-Lux Division, Tyler Kay Company, Inc., 775 Main St., Buffalo, N. Y.

• *When inquiring, refer to* **NS157**

Mitered Corners on Bleachers

More profits and less danger are two advantages offered by the manufacturer in presenting Universal "Miter Corner" bleachers. On the theory that unused space pays no dividends, the bleachers have been so designed that they afford

continuous seating around the entire floor, exclusive of entrance aisles. The danger that occupants will step off, or be crowded off, the ends of the stands in entering or leaving their seats is eliminated by the continuous seating and foot boards. The sections can be folded and put away when not in use.—Universal Bleacher Co., Champaign, Ill.

• *When inquiring, refer to* **NS158**

Pointer on Pencil Sharpening

A new device that makes a point of saving time and saves time making a point is the new streamlined "Electro-Pointer," pencil sharpener. The machine works automatically so that it is necessary only to insert the pencil in the orifice and let the sharpener do the rest. An ingenious size-changing device that is adjustable to any size of pencil is a feature of the machine and a point adjustment provides sharp or blunt points as preferred.—Triple "E" Products Company, St. Louis, Mo.

• *When inquiring, refer to* **NS159**

Stainless Steel in Schools

The day of the stainless steel schoolhouse is approaching with the introduction of Ludlite Bord, a product consisting of paper-thin sheets of stainless steel permanently bonded to an inorganic backing. Ludlite Bord can be used for wainscotings, walls and table tops and can be sawed, drilled, nailed and fabricated as easily as hard wood, the manufacturer asserts, while presenting the beauty, protection and ease of maintenance of solid stainless steel. However, Ludlite Bord costs considerably less.—Allegheny Ludlum Steel Corporation, Pittsburgh, Pa.

• *When inquiring, refer to* **NS160**

NEW LITERATURE

Steel Wool for Floor Maintenance

Slippery floors are a hazard that can be eliminated by the use of Sun Ray steel woolers, according to the manufacturer, The Williams Company, London, Ohio. A pamphlet describing the wooler, which can be used on any disk type of floor machine, has recently been released.

• *When inquiring, refer to* **NS161**

Safety in Swimming Pools

Underwater lighting for night use of swimming pools affords beauty plus safety, it is stated in a folder published by Russell & Stoll, 125 Barclay St., New York, N. Y., manufacturer of electrical specialties. Specifications for the floodlights and detailed installation instructions are included.

• *When inquiring, refer to* **NS162**

Superior School Buses

Safety and comfort in school buses are featured in a new booklet describing its 1941 line recently published by Superior Coach Corporation, Lima, Ohio. Six models of various sizes and price ranges, together with discussions of engineering improvements, are illustrated.

• *When inquiring, refer to* **NS163**

Sliding Grilles

A means of separating the school auditorium stage from the gymnasium by the use of a sliding grille is described in the new brochure of Cornell Iron Works, Inc., Long Island City, N. Y. The grille is a flexible steel curtain hung from an overhead track. It can be extended to any height by galvanized vertical rods running to the supporting track.

• *When inquiring, refer to* **NS164**

Protective Paints

Literature descriptive of specialty protective penetrative paint coatings has recently been issued by the Wilbur & Williams Company, Park Square Building, Boston, Mass. Some of the paints discussed include Bondlite, Dye-Crete, Defensite Coating, Totrust and Checkmate.

• *When inquiring, refer to* **NS165**

Fences for All Purposes

Various styles of fencing for all purposes are illustrated in the latest catalog of the Atlas Fence Company, Richmond St. and Castor Ave., Philadelphia, Pa. Included are descriptions of Atlas armed fence, bethanized chain link fabrics and wire mesh partitions.

• *When inquiring, refer to* **NS166**

Gas Ranges for Modern Schools

The "Magic Chef" fits right into the modern home economics laboratory, it is stated by the American Stove

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NEW LITERATURE (Continued)

(*Continued from page* 84)

COMPANY, 4301 PERKINS AVE., CLEVELAND, OHIO, in its recent brochure describing "Magic Chef" heavy duty equipment. The book also includes suggested layouts for home economics laboratories and lists three booklets, "The Magic Flame," "Things You Want to Know" and "Guide to Better Cooking," each of which can be used as class study material. All are available on request.

• *When inquiring, refer to* **NS167**

Problems With Fuel Oil

Designed to impart an understanding of various problems encountered in the use of fuel oil is the booklet "Burning Fuel Oil" recently issued by the COMBUSTION SERVICE COMPANY, 1451 BROADWAY, NEW YORK, N. Y. Such topics as atomization, combustion and efficient oil-firing are discussed and a chart on "Commercial Standard Specifications for Fuel Oils" is included.

• *When inquiring, refer to* **NS168**

"How to Paint"

Problems encountered in painting and preserving concrete, stucco, masonry and other surfaces, both interior and exterior, are dealt with in the new booklet, "How to Paint," published by MEDUSA PRODUCTS COMPANY, DIVISION OF MEDUSA PORTLAND CEMENT COMPANY, CLEVELAND, OHIO. Directions for preparing the surfaces, mixing and applying the paint are included.

• *When inquiring, refer to* **NS169**

To Promote Better Eyesight

"Facts You Should Know About Your Eyesight" is the title of a new booklet that is being distributed by the NATIONAL BETTER LIGHT—BETTER SIGHT BUREAU, 420 LEXINGTON AVE., NEW YORK, N. Y. The booklet contains information regarding various eye diseases; warnings against some of the "rackets" practiced by unscrupulous manufacturers, opticians and fake doctors, and discussions of corrective and preventive measures for better eyesight.

• *When inquiring, refer to* **NS170**

Freezer "Success Stories"

The fourth edition of "Little Stories of Big Successes" has recently been published by TAYLOR FREEZER CO., BELOIT, WIS. The booklet describes various models of ice cream cabinets, including the new Model 2060 which contains a 20 quart freezer. The cabinet has space for 20 gallons of mix and a hardening capacity of 60 gallons.

• *When inquiring, refer to* **NS171**

Water Cooling Coils

Heading the new literature line-up of TRANE COMPANY, LACROSSE, WIS., is a 68 page catalog describing a new line of water cooling coils: Type OS, which is a completely drainable unit with a single row serpentine arrangement of the types; Type TS, with tubes in a two row serpentine arrangement, and a new arrangement of the Type R, or cleanable tube, coil.

• *When inquiring, refer to* **NS172**

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Side Glances—

PRIORITIES! Suddenly a relatively obscure term becomes impregnated with significance. Now in September 1941, "priorities" is the most telling word in the language of the American manufacturer.

School administrators, by and large, have given little thought to priorities. Six months from now the word may have assumed disturbing proportions for them, too. If they cannot get replacements on a broken boiler or motor, if maintenance supplies are unobtainable without weeks of waiting, if orders for new textbooks and paper are delayed or restricted, they will understand the present plight of the manufacturer.

Fortunately, there is something that school administrators can do about the situation. It is not as if they were running a department store or a radio shop or a publishing house. Schools, so all schoolmen firmly believe, constitute the first internal line of national defense.

Very well, let us see that the Office of Production Management realizes the importance of the public schools in defense!

The National School Supplies and Equipment Association is seeking a preferential rating that will enable school suppliers to obtain the needed raw materials to supply the school market. On page 97 of this issue, leading manufacturers of nine classes of products essential to school operation state the problems that face them today or may face them in the immediate future. Read what they say and then be prepared to protect your school system from unnecessary sacrifices.

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BETTER PLANT PRACTICES

Care of the Grounds

With the trend toward larger school properties, the maintenance of grounds entails increasing responsibilities. At all times of the year, and particularly during the spring, summer and fall months, proper attention must be given to lawns, trees and shrubs; furthermore, all of the recreational areas must be efficiently maintained.

In the majority of school systems, according to a recent survey, the work is handled by the regular custodial staff with "extras" assigned to special jobs, such as grading or repairing playgrounds or road surfaces damaged by snow and sleet. Demands for such service vary, of course, according to the size of the property, the extent to which it is developed, and the geographical location.

No Winter Helps

Suppose we study the situation as it exists in Aberdeen, Wash., for example. Ray R. Colby, secretary of the Aberdeen public schools, explains that "inasmuch as we have no winter in this country and only a wet and dry season, about the only difference between the winter and summer schedule is that we must water the lawn in summer and not cut it quite as often in winter. We use a gasoline powered 24 inch machine for the larger areas and have little shrubbery to maintain."

Mr. Colby's regular custodial staff maintains the school grounds with a small amount of additional help during the summer months. "This work," he adds, "is a regular function of the custodians who work through the summer and, inasmuch as our school grounds are extremely small, it is not a really serious problem."

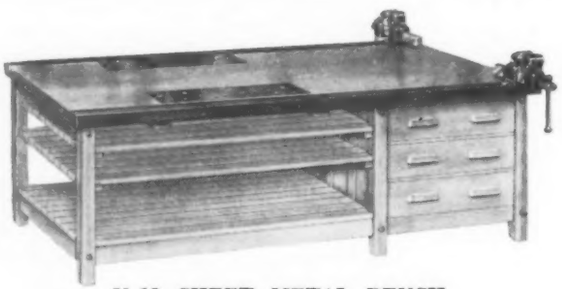
Enter: Snow and Ice

In contrast is the climate found in northern New Jersey. In Newton, as in Aberdeen, the custodial force includes ground maintenance as part of its work. Here, according to S. W. Palmer of the Newton board of education, the work is assigned to three men who put in an average of two hours a day apiece. This work comprises cutting lawns, care of shrubbery, planting flower beds and cleaning the walks and grounds.

"In the winter months," Mr. Palmer says, "there are only the walks to be kept clean and clear of snow. In the spring there is a general clean-up, rolling and seeding of lawns and planting and preparing of beds. In the summer the lawns and flowers must be cared for and necessary repairs must be made on walls and walks. In the fall another general cleaning of grounds and flower beds is essential."

Where "Extras" Are Needed

In Solvay, N. Y., where winter must again be reckoned with, John C. Hardy, superintendent of maintenance and re-



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P-51 DRAFTING TABLE

N-14 MANUAL TRAINING BENCH

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pairs, uses his regular custodial force to maintain the grounds except in summer when the athletic field or lawns may require grading. It may also be necessary to patch holes or breaks in the tarvialithic playgrounds of two of the schools. Work of this nature is done by a separate crew.

Incidentally, last season Solvay experimented with an outdoor skating rink on the high school grounds but it was unsuccessful because of weather conditions.

How the Green Grass Grows

This question of grounds maintenance brings to mind a letter received recently from a custodian who is perplexed as to how often to cut grass. Also, he wants to know whether or not he should permit the clippings to remain on the ground.

All sorts of theories are expounded, each of them with advocates ready with definite proof to support their contentions. The majority are in favor of mowing the lawn at 1½ inches and permitting the clippings to remain on the ground. The food value of these clippings is important to the growth of the plants, they tell us.

Then, too, assuming that the lawn contains considerable Kentucky bluegrass, it is important that it be given a chance for life instead of being killed too soon. This type of grass will not stand close cutting. The food in these grasses is made in the blades, according to the best authorities. Therefore, to grow sturdy and strong the plant must have a steady food supply, which means that the producing plant must be maintained at as near normal production as possible.

Here is how one lawn enthusiast, after many experiments, gets results. The grass is mowed after it has grown from ½ to ¾ inch. This means it must be mowed frequently, to be sure, but actually it requires less time and effort than making heavier cuts. The clippings hardly show at all. Thus, food values are held steady, he maintains, making for strong growth in both the top and the roots, which, in turn, makes the grass more resistant to drought and disease.

Handbook for Custodians

It should be on every custodian's desk, this "Handbook for School Custodians" recently issued by the University of Nebraska. In its revised form, Alanson D. Brainard, assistant superintendent of schools, Muskegon, Mich., and his associates have included a wide variety of information that is needed by the custodian if practice is to keep pace with the progress made in the development of technics for the care and maintenance of school properties.

Starting with the responsibilities of the custodian, this volume describes his qualifications and relations with other members of the personnel.

The chapter on the work schedule is particularly enlightening, as is the section of the book describing necessary equipment and supplies. Specific information is given on the care of school floors, drinking fountains, lavatories, toilet bowls and other surfaces. There are chapters on heating and ventilating, fire and accident prevention, illumination and the maintenance of buildings, equipment and school grounds.

We are quoting from the first chapter six responsibilities that the modern custodian assumes with his job and that he would do well to keep before him at all times:

"(1) It is your responsibility to care for the community's expensive plant and equipment; (2) you must put to good use the supplies available and should economize wherever possible; (3) you are housekeeper of the building; (4) the safety and health of teachers and pupils are in your hands; (5) you are often a guide to boys and girls, and (6) you play an important part in interpreting the school to the community."

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OUR 35th ANNIVERSARY 1906 1941

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LOOKING FORWARD

Witch-Hunt Fails

EVERY period of crisis brings its witch-hunters. The 1940 crisis was marked by a heavy attack upon the textbooks used in the public schools of the United States. A barrage of criticism, stimulated by a group of special business interests that felt themselves threatened by progressive teaching, was released by hired writers in a few easily controlled publications.

These early efforts were supplemented by the National Association of Manufacturers, which hired one of Columbia's economists, Frank Ralph West Robey, an early Roosevelt progressive later turned Tory, as its chief investigator. When this gentleman was ready to draw his molelike conclusions from the mountains of advance publicity, the N.A.M. cautiously withdrew into the background and refused to back the conclusions of its own hireling. Despite the efforts of other small and active groups, the "hunt" languished.

Up to date the net results of this propaganda to place the schools on the defensive have produced desultory criticism of one or two books among the many thousands in use. Even those books have failed to make the "subversive" category.

The teaching profession, the textbooks and the methods of teaching in the public schools of the United States may be criticized more severely for being ultraconservative than for being radical. The public schools follow social trends. It is not surprising, therefore, that the most recent attacks upon American textbooks have failed dismally. A better motive than the personal "smear" type used in this instance to serve selfish ends will be necessary to convince the people, who are much better prepared to analyze and classify propaganda than in 1917. On the whole, the 1940-41 attack has served some good by clearing the air and enabling the people to reassure themselves.

Let's Go Further

THE statement recently issued at Washington that the Chamber of Commerce of the United States has appointed a committee to "cooperate with the American Association of School Administrators" is good news. Assuming that this movement is sincere in its purpose, it means that business has begun to realize the importance of public education in national welfare. A certain type of cooperation has already been established with the organized parents.

Certain cautions should be observed. The public schools are conceptually impartial, nonpartisan, nonsectarian and classless. They are agencies for the harmonization of cultural conflict. The public school educator must not put himself in a position in which he actually destroys confidence in public education through direct affiliation with business interests while ignoring labor interests. In our opinion, this type of cooperation would be much more effective, much safer and more productive of real value in the development of understanding and confidence if organized labor, as well as organized capital, had this cooperative relationship with public education.

Politics and Education

THE first half of 1941 offers four startling examples of political interference with free teaching that rank with the earlier university wrecking efforts of LaFollette in Wisconsin and Bilbo in Mississippi.

John Gunderson Rockwell, progressive and strong state superintendent of public instruction in Minnesota for six years, crossed Gov. Harold Stassen's political path in 1940 when the governor attempted to acquire control of the state education authority by having his appointees (four out of five) on the state board discharge certain individuals in the department of public instruction. Mr. Rockwell testified in behalf of one of these individuals, E. B. Carstater, before the state civil service board and the board immediately reinstated Carstater. The state board of education then suspended Superintendent Rockwell and brought flimsy charges against him that resulted in his suspension.

The University of Wyoming is under the direction of a board of trustees appointed by the governor. The individual terms of office are short, making it possible for a governor to exercise unusual control through appointment. The early history of the University of Wyoming is replete with instances of political interference with teaching personnel and teaching policy.

Despite its youth, this institution has had several able men as president but, until the advent of Dr. Arthur Griswold Crane in 1922, the tenure of these early incumbents had been unusually brief. As years passed and Doctor Crane remained and governors appeared to relax their personal control somewhat, the educational world felt that Wyoming had come of age.

Somewhat more than a year ago, a strong personal feeling developed between the governor and the president. When the governor appointed three trustees in February 1941, it was whispered that they were committed in advance to the discharge of the president. This whisper became a legal fact a few months later when Doctor Crane was discharged. After eighteen years of superior service, the only public reason given was a "difference in policy between him and the board"! So far as can be learned, the differences between President Crane and Governor Smith were of a personal nature.

Dr. Walter Cocking, Iowa born and educated, former St. Louis curriculum specialist, Peabody College professor of education, Tennessee state superintendent of public instruction and for some years able dean of the college of education, University of Georgia, was reported by a disgruntled staff member to have stated that he hoped colored teachers could be admitted to a teacher practice school planned for some time in the future. Although Dean Cocking denied having made such a statement, Governor Eugene Talmadge seized upon this report for his own personal political advantage. He vowed that he would "stamp out communism" in Georgia's educational system and drive every "foreign educator" from the state. In the governor's myopic and parochial vision all individuals not born in Georgia are "foreigners."

The governor personally discharged Dean Cocking but eight members of the board of regents rejected his action and renewed the dean's contract. Governor Talmadge then forced the resignation of three members of the board. He appointed three new members to the board of regents and committed them in advance to the discharge of Dean Cocking. The new board met in July, rescinded the action of the previous board and voted the governor's will by discharging Dean Cocking. No question of competency had been raised.

The real reason was that Doctor Cocking had sinned against the governor and his bourbon reactionaries by refusing to play the governor's personal political game and prostitute the university for private benefit. For extra measure and for no reason at all, the board also discharged Dr. Marvin S. Pittman, for the last seven years president of Georgia Teachers College. Doctor Pittman is a native of Mississippi. The governor won a political victory but freedom of teaching, as well as education in the state of Georgia, received a body blow. There can be no hope for real scholarship or freedom of teaching in institutions of advanced learning when the professorial staff must prostitute science, truth and nonpartisanship and moral principle to the whims of a culturally illiterate state executive.

The best schools in the United States exist where community and state education authorities have been divorced from partisan politics and where the people exercise the right to select both their community and state educational representatives. Where the actual control of state departments and institutions of advanced learning is still under the political control of the governor, there, also, are the weakest institutions and the greatest amount of political interference with education. Capable scholars are not attracted to schools in which freedom of teaching is subordinated to personal or partisan whim. The single modifying factor to this generalization is the strength of the educational tradition and strength of the public opinion within both community and state.

The only way to maintain education free from the stultifying effects of politics is to make provision for the exercise of educational responsibility through an adequate state authority selected directly by the people for long, overlapping terms and sufficiently independent of partisan controls and personal politics to make possible the employment and protection in their work of competent educational specialists selected and appraised solely on the basis of merit. The education function is much too important to permit manipulation by selfish politics.

Protective Measures

UNDER ordinary conditions, the political extremes of fascism and communism are difficult to live with because their ideologies make impossible the compromises that are so essential to democratic operation. While democracy admits and accepts the concept of change as inevitable, it also believes that change should be made peacefully by means of free discussion and by voluntary majority conviction with a reasonable regard for the rights of the minority.

Both the communist and the fascist believe implicitly in revolution and the use of naked force and terror to achieve their objectives. Having attained their purpose, they believe in the maintenance of their plans by the liquidation of all dissentients and by control through force. It is, therefore, quite within reason and the limits of democratic consistency to deny these extreme points of view a place in the total pattern unless they accept and are willing to practice the rational and sensible methods of change through peaceful evolution.

All shades of political opinion have been tolerated in the United States. Democracy can afford to be tolerant and complaisant to these dynamic extremes during periods of peace when the safety of the people is not involved. It is difficult to justify a continuation of political complaisance under extraordinary condi-

tions, such as those obtaining at present, when democracy is engaged in a life struggle against the forces of totalitarianism, under whatever label they may appear.

Since public education is a function of the democratic state, there can be no question of the right of the state to exclude from its teaching personnel individuals who are affiliated with national and international groups whose object is to destroy our democratic way of life. Therefore, the voluntary action of the American Federation of Teachers in ousting those local New York and Philadelphia unions that had been proved communistic in their political faith and in their relationship to international communism deserves strong commendation from the teaching profession and the public.

A people is entitled to its own social and political life and need not sit by with folded hands while cherished liberties and institutions are being undermined and destroyed. There is no place in our public schools for teachers or administrators who are fascists or communists. They should be eliminated whenever the facts of their active association or affiliation with these groups can be proved.

The sensible safeguarding of our democratic birthright by exclusion of subversive and disloyal personnel cannot be construed as intolerance but merely as a safeguarding procedure. At the same time, extreme care should be exercised to avoid unjust persecution of innocent individuals by small-fry politicians and social bigots who seek their own selfish gains by falsely accusing people of being communist or fascist.

Needed Interpretation

PUBLIC education is moving into a difficult period. The first flush of the national defense effort of 1940 has passed into an active war period. Despite the absence of technical declarations and immediate aggressive measures, few people question that the United States is already deeply involved in the war. War today has many phases and the fact that this country is temporarily emphasizing economic participation should not blind anyone to the realities. This gargantuan struggle of free men against the servile concepts of totalitarianism may last four or five years more.

Unless careful efforts are made to keep the people informed of purpose, value and need, the possibilities are good that other more dramatic and dynamic activities of the war period may place the educational function considerably in the background of national effort. Competition among the numerous aspects of government and among the several agencies of government and an increasingly narrow view of the total defense effort may subordinate education to more immediately attractive activities.

An objective appraisal of the proportional value of areas of preparation for the total defense of the American way of life leads to the inevitable conclusion that public education is the first line of internal defense against fascism and communism just as the Air Force, Army and Navy form the first external defense against outside aggression. Without a one-way system of free and universal education that is available to all, it will be impossible to maintain, to say nothing of improve, the character of the democratic way of life so increasingly vital and meaningful to us.

In the sense that the much more dramatic activities of defense will compete for the limelight of attention, it becomes increasingly more important for the school to study its own interpretative program. It is exceedingly doubtful whether the tendencies in recent years toward expansive and expensive personal publicity, "defense of the schools," dramatization of perimeter activity and the physical or social exploitation of the children will suffice. The times call for much simpler yet more comprehensive interpretative plans.

The fundamental interpretative need is, first, to make all professional agents within the schools so conscious of the vital place of education in a democracy that they will be able and eager to convince the people of these truths. Values that should be stressed are the importance of education in developing the competence essential to living in a society of free men and women; the continued need for greater equality of individual opportunity in the schools; the development of democratic attitudes, faith and ideals, and the importance of continued learning in adult life. The most important job interpretation can accomplish is to renew the faith of the people in the fundamental importance of public education to them and to their children, a faith that has been somewhat shaken during the past decade by the schools themselves, by the efforts of the social workers in creating competing federal agencies and by the peculiar preachments of many national leaders.

Interpretative efforts should include admission of the limited nature of the school as a social agency, its development as an extension of the home and the need for greater partnership between home and school expressed through better parent-school cooperation. The school should be less eager for extension or increased power for its own sake, attempting instead to develop greater cooperation with other governmental agencies in the total educational program.

It should emphasize the need for maintaining state control of educational policy and community administration of the schools. Greater emphasis should be given to the importance of maintaining control of education in each community by the parents. Only as the schools can recreate the fundamental faith of the people in the significance of their educational efforts will it be possible to maintain and improve public education during this war.

The Editor

Secondary School Pupils

GEORGE T. STAFFORD

LIVING perilously is a part of the price civilized man must pay for his inventions and his mores. Modern living presents safety problems for which at present we have no precedent to help in their solution. We must learn to live in a manner that will allow us to participate in a maximum of the benefits of modern civilization with a minimum of exposure to unnecessary hazards.

During January of this year 1502 British civilians were killed by bombs. Almost twice this number are killed in automobile accidents in the United States each month. According to the preliminary estimates made by the National Safety Council, the accident figures for 1940 show 96,500 killed and 9,100,000 injured. Many people think of accidents in terms of motor vehicle accidents. This is natural when one considers that 34,400 lives were lost through motor vehicle accidents in 1940. But, during this same period 32,500 lives were lost in home accidents; industry claimed 17,000 lives, and 15,500 lives were lost by public accidents.

The term "safety first" has proved effective in reducing industrial accidents but this term is a direct challenge to every act of heroism the race has ever experienced. Life at its best means taking risks for things worth while. The youth of today is not inherently interested in safety. He is interested in adventure, mastery and the thrill of power. He must be shown that skillful living makes adventure possible, brings recognition and should gain the approval of one's fellows. One must learn not only to live safely but to make the life that is saved more worth while. The final outcome should be a higher quality of citizenship and a better appreciation and practice of the art of living together.

The formula for safe living is made up of the following principles: (1) know the hazards that surround us; (2) eliminate all unnecessary hazards; (3) safeguard the hazards that cannot be eliminated, and (4) act skillfully in order to avoid creating unnecessary hazards.

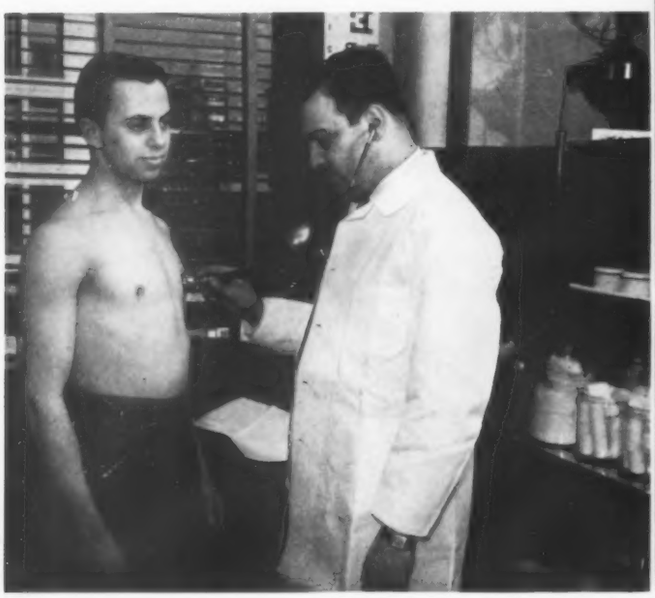
There were 6500 school children from 5 to 14 years of age killed in 1940, 2600 of them by motor vehicles. Drownings, burns and falls accounted for the majority of the other deaths in this age group.

For a number of years the elementary schools have been teaching safety with a high degree of success, although the death rate is still high. Nineteen per cent of all pupil accidents occur in the school buildings; 18 per cent on school grounds, and 7 per cent going to and from school. Of the remaining 56 per cent, 24 per cent occur in the homes.

The accident picture for the age group from 15 to 24 is bad. There were 12,500 deaths in this age group during 1940, 6800 of which were due to motor vehicle accidents. With more than two million youths reaching driving age yearly, the school has an opportunity to educate these youths in correct driving. Secondary school pupils are driving cars. Here is an opportunity to teach them to drive correctly!

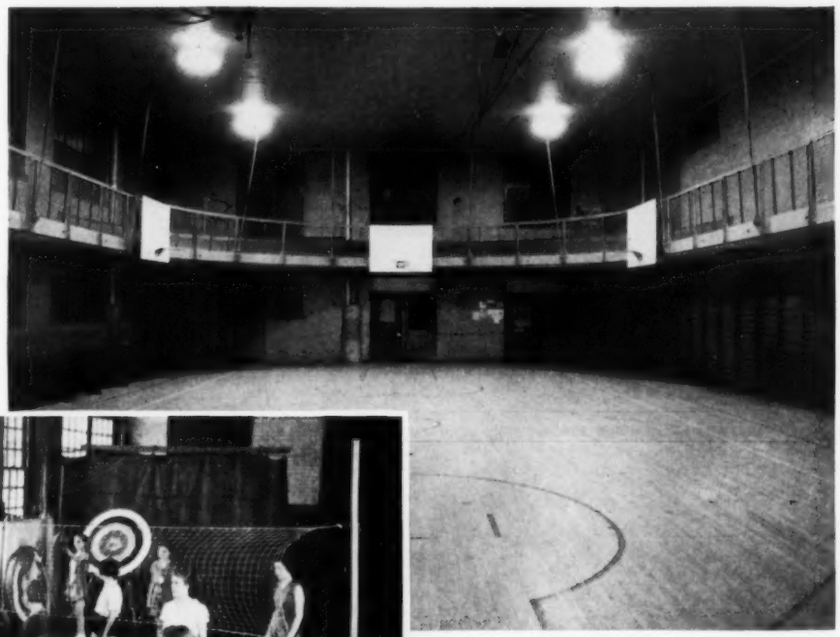
The American youth wants adventure and thrills. What more can he ask for than to match his skill with the 44,000,000 drivers of the 30,000,000 cars on the 3,000,000 miles of roadway in the United States. Driving is a hazardous task but, with a thorough understanding of its hazards and a high degree of skill in the operation of the modern car, the hazards can be reduced to a minimum.

Below: All pupils should be given a physical examination to determine their fitness to participate in athletics.



Need Safety Education, Too

Professor of Physical Education
University of Illinois



There are more than 8,000,000 bicycles in use today. The yearly 800 deaths and more than 43,000 injuries to bicyclists are due mainly to collisions and falls. In three out of four accidents the rider was at fault and in many instances he lacked the skill necessary to manipulate his bicycle safely. Bicycling could be made safer if school children were taught the hazards of bicycle riding today and also their responsibility in the use of the highways.

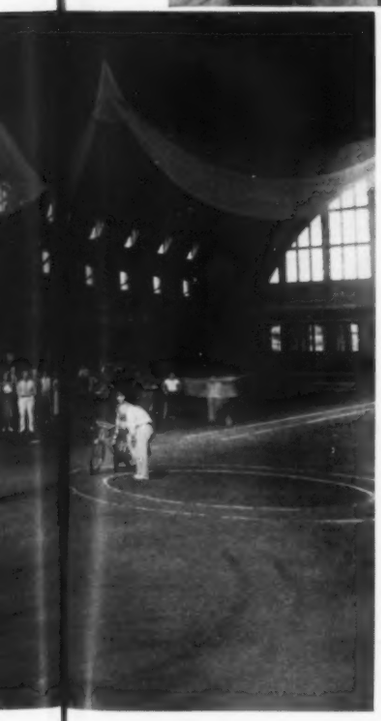
The youth of today is participating in many athletic activities. The very element of danger makes these athletic activities stimulating and satisfying adventures. This participation involves many hazards, but a careful study of the statistics reveals a low accident rate when athletics are properly organized and conducted. Safety in athletics is dependent upon the following factors:

1. Nature of the activity. Football, for example, is considered more dangerous than touch football, but the figures for secondary school pupils show a higher incidence of accidents for touch football than for football. Many of the accidents in touch football are due to players' not being in condition, deficient motor skill, dangerous play areas and inadequate leadership. All pupils should be given a health examination to determine their fitness before they are allowed to participate in athletics.

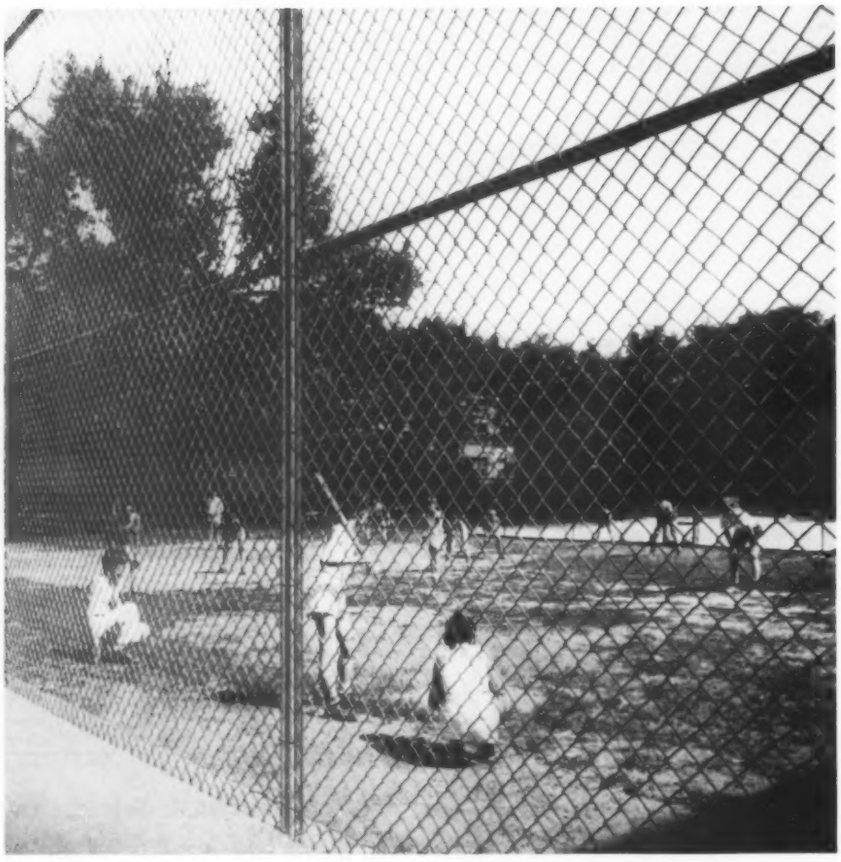
2. Facilities. Many gymnasiums were built for calisthenic exercises and apparatus work. Basketball and other team games become unnecessarily dangerous when facilities are inadequate. A carefully planned program based on the available facilities will help to reduce the hazards.

3. Equipment. Industry has reduced its accident toll by insisting that its workers use only first-class equipment. Worn-out tools are discarded. Only the best type of equipment should be used in athletics and it should be inspected regularly. In many instances accidents resulting from athletics can be avoided if the participant is required to use the prescribed protective equipment. Head injuries in football have been reduced since the rules were changed to require the wearing of helmets.

4. Leadership. Perhaps the most important safety factor in athletics is good leadership. The good leader has the welfare of the pupil at heart and refuses to exploit him in highly complex athletic competition that only tends to serve the ulterior purposes of some selfish group. Many accidents are the result of pupils' participating in activities beyond



Top: Good lighting is essential to safety in night games. Center: Volley ball played in a restricted space is dangerous. The chairs and walls are potential hazards. Left: Bicycle testing program at the University of Illinois.



A high chain link fence surrounding school grounds protects pupils playing out of doors. Photographs from the National Safety Council, Chicago.

their capacity. The right type of leader knows the capacity of his pupils. He insists on a careful medical examination before the pupil is allowed to participate; points out the hazards of the activity; demonstrates the correct performance; emphasizes the need for the pupil to be in condition to perform the various activities, and guides the pupil so that unequal or too lengthy competitions are avoided.

5. Proper administrative control. The athletic program should be a recognized part of the curriculum and under the department of education. Many programs are designed for the exclusive play privileges of the athletically elite.

The excellent results of the safety program in swimming may be cited as an example of good organization for safety in athletics. Few drowning accidents occur in supervised swimming pools. A study of drowning accidents reveals that in 60 per cent of the cases the individuals could not swim; 24 per cent could swim "a little," and 14 per cent were rated as swimmers. A further study shows causes of drowning accidents:

1. Physiological. In these cases the individual became exhausted because of poor condition or had some organic upset, such as heart failure.

2. Mechanical. These accidents show that the individual lacked proper knowledge of the swimming conditions. Stepping off into deep water, hitting a submerged object or the overturning of a boat are examples of this.

3. Psychological. Accidents in this group occur because many overestimate their capacity, attempt "movie" types of rescues and, in general, resort to showing off.

A knowledge of first aid is important. The school has accepted the responsibility for giving the pupil some knowledge of first aid. In athletic activities the pupil can be given practice in the proper care of minor injuries and thus learn how to prevent them from becoming serious.

While much has been done through safety education in the school, it must be realized that safe living is a continuous process. Community cooperation is necessary if the pupil is to have an opportunity to practice the safety habits that he has learned in school. Progressive communities provide safe places for work and play. Many adults of today show behavior patterns that are anything but good examples of safe living. The father who disobeys many traffic regulations and often boasts of his disobedience and disregard for enforcement can expect little success when admonishing his son about safety practices.

Teaching pupils how to act skillfully in order to avoid creating unnecessary hazards should be one of the main objectives of safety education. Space does not permit giving the full details pertaining to the organization of a safety program within the schools. Some excellent books on safety education, such as "Safety in the World of Today" by Stack, Seaton and Hyde (Beckley-Cardy Company, Chicago, 1941), contain details of this organization. The educational division of the National Safety Council will prove helpful in solving the problems of organization and curriculum construction.

A safety club or a school safety council can be used as the starting point of a school safety program. An accident reporting committee can contribute much in the way of keeping records of accidents. These records can be studied and ways and means can be devised to prevent a recurrence of the accidents. Pupils can be assigned to inspect the various areas of the school, their homes and the community for mechanical hazards and unsafe use of facilities.

School safety patrols have proved effective in the elementary schools. Why not try them in the more hazardous secondary schools? Bicycle clubs can be organized to make bicycling a safer activity. Fire prevention clubs, safety engineers or a shop safety committee, skillful drivers' clubs and other such organizations that include other areas in the pupils' daily experiences can be used to promote safety consciousness and safer behavior among high school pupils.

A special course in safety is desirable but a great deal can be done through integration. Whatever method is used, safety should be considered as an integral part of education for living in the world of today, unless we are content to go on having 96,500 persons killed and 9,100,000 injured every year.

How Can We Retain Democracy?

ROBERT H. KNAPP
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A summary of the basic principles that educators, who are in large measure responsible for perpetuating and improving the democratic way of life, must always keep in mind

THE fundamental philosophy of the totalitarian state decrees that individuals, grouped in masses, shall serve for the perpetuation of the state, which is regarded as an entity in itself. Everything is planned and executed in terms of the state. Democracies are guided by a somewhat different philosophy in that individual consideration is given to the development of the individual citizen since a democracy is a way of life decreed by the people for their own happiness and advancement.

Free public education is the backbone of democracy and the American way of life. The active participation of an enlightened citizenry is the life blood of democratic living. The opposite is true of totalitarian governments. Totalitarianism exploits human resources for the good of a few. It has complete disregard for individual personalities and the enriched and abundant life. Since the people of our land, at great sacrifice in many instances, have set up and are maintaining free public education, the problem often confronts us as to the usefulness and function of such an institution. Our problem, most assuredly, is not to determine whether it is within the province of society to use the schools in perpetuating and improving democracy, but rather to determine how the schools may best be used to serve society more adequately and make them more democratic in carrying out this task.

Democracy, as a way of life, will never fail because it is hinged on the principle that each individual personality must be developed to the utmost and regarded as something unique and different. If democracy should go out of existence, it will do so because of the inadequate and undemocratic training, beliefs and attitudes of the people who have been given the task of sponsoring such a way of life. The educational program of the United States can prevent such a catastrophe if it lists among its objectives the creation of desirable patterns of thinking and doing, the development of positive attitudes of respect for individual personalities and the inculcation of the basic principles underlying democratic living in each individual citizen.

Inasmuch as the individual is the unit of the social group, it follows logically, then, that if we wish to perpetuate and improve something pertinent to the group as a whole, attention must certainly be given to the fundamental unit. Preparation of the individual for fruitful living in a democratic society is more difficult than preparing an individual for life in a totalitarian state. Providing worth-while and meaningful experiences that will develop the whole individual for maximum growth is much more difficult than developing one small segment of the total individual. Obviously, individual development will pay more dividends to society than partial individual development.

Farsighted educators are becoming increasingly aware of their responsibilities in serving democracy and its way of life. They realize that democracy and real education cannot exist without each other. Democracy succeeds according to the ability of its people to make intelligent choices. A democratic way of life cannot long endure with the masses of the people shrouded in a cloak of ignorance.

Dictatorships thrive best when the masses are kept in total darkness. Consequently, such governments are not evolving and are not improving their way of life. Their mode of living is receding rather than moving forward. A democracy cannot be static. It must be constantly moving forward toward something more constructive, something that will improve its way of life. Educators and leaders must take heed when a democracy is not making progress.

Since democracy is the way of life under which our people have chosen to live, the challenge is: What can the schools, as servants of society, do to retain and improve this great principle?

What are the issues with which the schools must concern themselves if they wish to perpetuate democracy and improve society? There are at least five basic principles that the leadership of our schools must keep in mind.

1. *The individual pupil must understand the meaning of democracy.* Individual pupils must understand that democracy is a way of life and not merely a form of government. They must realize that it is something more than a theory to be talked about. Each pupil should be led to see and feel how living democratically permits individual initiative and growth, which eventually lead to the abundant way of life. One may call such a procedure indoctrination, propaganda, teaching or what-you-please. Regardless of the terminology, this concept of life must be made a part of each child's pattern of thinking and action.

Democracy is not something that can be pinned on one's coat lapel and displayed. It is not the memorization of creeds, salutes and other mechanical phases of government. Democracy is that intangible force that must come from within the individual. It must be shorn of those glittering generalities of which we speak so glibly. Democracy must become a part of the thinking, ideals, attitudes and actions of each school child. Only when the child feels a need for and a meaningful attitude toward democracy will he practice, live and believe in the democratic way of life. True democracy works from the inside out; superficial democracy and totalitarianism work

from the outside in. Totalitarianism thrives on the extrinsic, on the force from without which curbs, inhibits and shapes for the state all individual personalities, capacities, thinking and living. Individuality is a remote term in a totalitarian state.

2. *The progress of any society represents the total of its individual members.* If the total heritage and culture of a group of people are to grow and expand, obviously the unit of society, the individual, must be given first consideration. The potentialities and capacities from individual to individual spread over a wide range. Heredity has set up capacities and determined their limits. Education must take cognizance of individual differences and provide meaningful experiences accordingly. Society will move constructively forward only if each individual is permitted to develop his peculiar capacities to the fullest extent.

Recognizing Individual Differences

It is the responsibility of education to determine the differences as early in the life of the individual as possible and to provide meaningful experiences that will bring these capacities to fruition. No two individuals are alike in all respects. The weakness of one individual may be the strength of another. We must recognize and educate for individuality in the schools. Our policy in education should be to start at the stage of growth at which we find the individual and take him as far as innate limits will permit. Our program must embody education of the masses on an individual basis. There must be no machine education, no regimentation, no conformity to a single pattern. We must have as many different personality patterns as we have individuals in school.

The totalitarian schools attempt to cast the entire group into one pattern or mold. There is no connection between learning and living in such a society. Fruitful living and the abundant life are precepts that are unknown to dictators.

3. *Education must train the individual to solve his problems.* Democratic living is based upon the premise that the individual members of society are capable of thinking out and arriving at suitable solutions to problems. Education must not be regarded as a series of experiences that will train the individual for the government, but, rather, it is education to be the government. If the success of the government depends upon the individual members, then it is of prime importance that individuals be trained to solve problems intelligently.

The technic of problem solving can be taught. The traditional school with all of its mechanizations was not effective in teaching problem solving. With an emphasis on growth and meaningful experiences, the modern school recognizes this challenge.

Problem-Solving Ability Varies

Inasmuch as individuals differ in intellectual, social, physical and moral capacities, problem-solving ability will vary accordingly. The degree of proficiency that is attained in solving problems will vary from individual to individual and from task to task. What may seem to be elemental attainment for one individual may represent the zenith for another. Democracy needs problem solvers. When groups of people are no longer able to solve their problems, dictators step in and take charge of the situation.

4. *Individuals must become participating, sharing and cooperative beings.* Contribution comes through participation. Modern psychology teaches us that we learn by doing. Growth comes as a result of the interaction between the organism and its environment. All members of a democratic society must be participating members, if that form of living is to move forward to greater achievements. There must be participation in civic, social, religious and economic organizations for these institutions have definite functions to perform in democratic living.

Education must inculcate the concept of participation in each individual. This, perhaps, can best be done by practicing participation in the everyday experiences of the classroom, in the gymnasium and on the playground. Education should not be considered preparation for democratic living but should represent democratic living itself. Meaningful experiences must be the backbone of the curriculum.

Democracy means that individuals are helping one another. It means that there is an interdependency that comes as a result of sharing. Under a democratic form of living, society is, naturally, more complex. With complexity come the opportunity and necessity for the individual to make much finer adjustments to environmental factors. Specialization permits greater variability in behavior. This is in the direction of progress because individual members can profit from the contributions of others. Division of labor, living interdependently, cooperation and shared communal living are basic to democracy.

5. *Adequate educational opportunity must be extended to all the children of all the people.* It was not within the province of Mother Nature to distribute equally the great natural resources over this fertile land. Population movements have not been, in many instances, toward the location of wealthy regions. Some of our greatest oil and mineral producing regions are sparsely inhabited. Likewise, the location of business and industry has been influenced by rivers, harbors and other uncontrollable factors. The wealth of the nation must be used to develop the intelligence of the nation.

Must Develop Intelligence of All

Since democracy is a government by the people, and expressly for their benefit, all of the intelligence of all the people must be developed. This necessitates adequate educational opportunities for all. Great strides have already been taken by certain states and the federal government in attempting to provide adequate educational facilities for all. This policy should continue but we should ever be mindful that control should remain in the hands of the people.

There is no question that the schools must perpetuate democracy and the way of life that it engenders. The question is: how can the schools best serve the ends of democratic living? Education must realize that democracy is a way of life and that the ideals, attitudes and patterns of thinking and behavior must be made an intrinsic part of the equipment of every citizen. Each individual must be made to feel his responsibility in perpetuating and improving the democratic way of life. Each must feel the need for participation, interdependence and cooperation with other members of society.

Labor's Philosophy of Education

WILLIAM GREEN
President, American Federation of Labor

Vocational education must supplement — not supplant—cultural education, Mr. Green warns, and urges an alliance between education and labor to correct the faults in the present curriculum

THE unions that are affiliated with the American Federation of Labor have always considered that they have a responsibility for maintaining standards of workmanship among their own members. In the days of hand labor and the earlier machine tools each beginner learned on the job. Our unions provided plans prescribing apprentice training with the experienced workers training the apprentices.

As technical progress produced machine tools driven by electric power, specialization in tools made possible mass production methods. Our apprentice type of training was no longer generally applicable. New types of skills were developing that required training in basic sciences.

We were disturbed at the general tendency to classify all new jobs and occupations as "unskilled" without any effort to find out whether new skills and related information could not be provided for the new employment. There was also a likelihood that employers would undertake to prescribe a type of training for these industrial learners that would not consider their welfare as citizens, as well as workers.

So the American Federation of Labor turned to our public school system to place upon it additional responsibilities and asked that changes be made in the curriculum that would adapt it to the needs of those who expect to earn a living as industrial workers so that they might be educated for creative living.

We believe that the schools should provide the same opportunities for those preparing for industrial occupations as have been given to those preparing for professions. We did not propose to decrease or to limit broad educational training or cultural opportunities for those preparing for industry. On the contrary, we hoped that technical training could be improved and that each individual would enrich his personal resources and achieve that understanding that makes all life experiences opportunities for culture. Experience of twenty years with vocational education shows that our high hopes were not altogether well founded. It was less difficult to carry a rather narrow program of work training into the school than to provide the broad supplementary instruction and related information that are necessary to make work a continuously creative experience.

Labor must bear some of the responsibility for these shortcomings. We have not insisted upon representation in the planning and the carrying out of occupational courses with sufficient force to get results. Without the practical experiences of those who do the work, training cannot be most effectively planned to serve the needs of individuals, both as workers and as citizens. Vocational education necessitates an alliance among educators, managements and workers.

Because we do not want our broad educational program narrowed for those who are looking to industry for employment, the federation has proposed that the high school curriculum should be reorganized to provide for all, regardless of occupational choice, the training that is essential for citizenship and essential for our common life. Specialization needed for vocations should be deferred until there is sufficient maturity for intelligent selection. Without a broad basic education, individuals are not prepared to adjust themselves to changes in industry and to fit into new occupations.

There is a distinct warning in the New York study which showed that, although boys and girls with vocational training might find jobs more quickly, those with academic high school training held jobs better and made more sustained progress. Labor does not want vocational training to supplant cultural education but to supplement it.

In this emergency when huge sums are being appropriated for the expansion of vocational educational institutions and training, there is real danger that the broad educational program may suffer. Labor believes that the schools should not be diverted from their responsibility of educating future citizens.

Defense training of adult persons for war production, the federation has declared, can best be done on the job, with the schools giving related instruction and supplementary information. Time is the important element in defense training so that expediency must prevail over thorough methods. However, safeguards become clearly necessary and all such programs should be under the direction of joint committees of educators, managements and workers.

All through the emergencies of the past decade the federation has contended that the normal agencies should be expanded to deal with emergency need so that the standards and safeguards worked out under normal conditions would facilitate constructive methods and results. Education, we believe, is properly a function of the local government. This principle is essential to protect the schools against regimentation in support of varying political purposes. We have a warning in the way education has been made to serve revolution in European countries.

The American Federation of Labor has, from its first organization in 1881, been one of the staunch supporters of our public school system and has stood for ever wider and better educational opportunities for all. We have reason to know how unequal educational opportunities create unbridgeable gulfs between groups and handicap individuals for life. We want more education in order to be better workers and in order to share in material progress and to live more satisfying lives as citizens.

Youngstown's Junior High

PLINY H. POWERS

Superintendent, Youngstown Public Schools, Youngstown, Ohio

THE James Hillman Junior High School, Youngstown, Ohio, which was dedicated in September 1940, is an eloquent expression of Youngstown's eagerness to meet the needs of the child of today by providing the school building of tomorrow. The modern junior high school requires a building with a flexibility of design that is adequate to meet the demands of a broad, exploratory program. Throughout the James Hillman school this essential adaptability is obvious.

Each classroom is equipped with movable desk seats, a two-way sound system, composition flooring and green chalkboard. The chalkboard, which is made of satin-finish plate glass, enhances legibility and eliminates glare.

Unit ventilators bring warmed air into each classroom directly from the out-of-doors. Steel sash windows, used throughout the building, permit approximately 70 per cent of the exterior wall surface to be utilized for natural lighting.

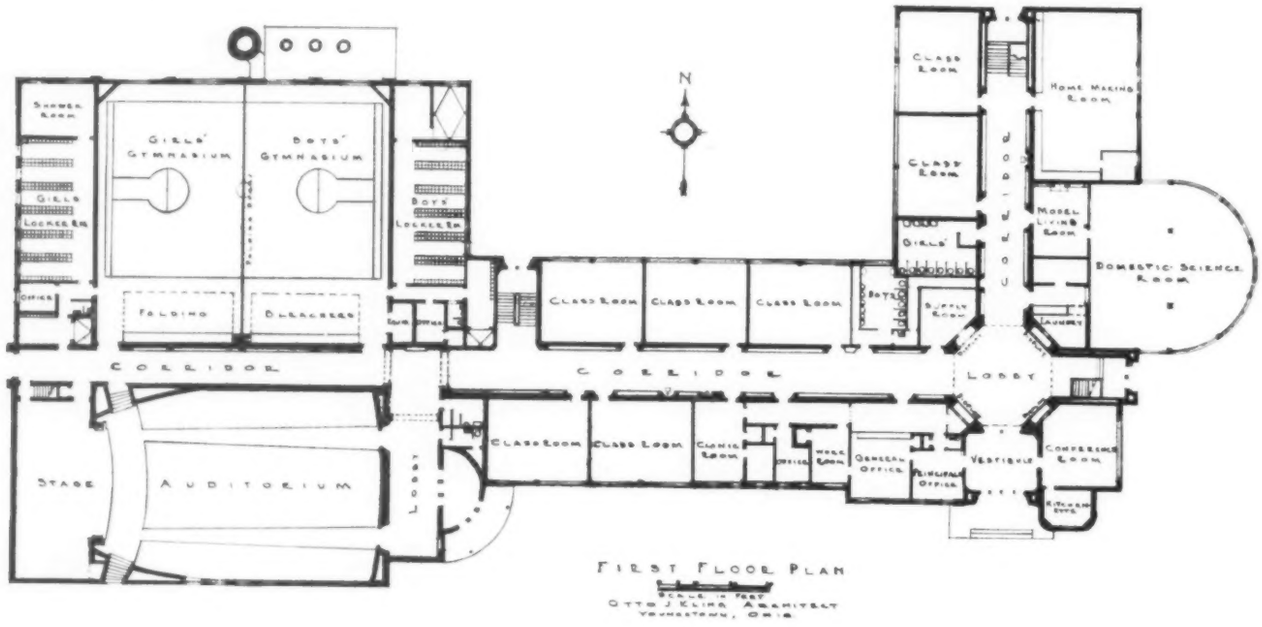
A soundproofed library in the center of the English department has the most modern library furniture, consisting of charge desk, magazine racks, 13 tables and 72 pupil chairs. Economy in construction was accomplished by introducing equipment with multiple functions whenever possible. This is best illustrated in the gymnasium, the cafeteria and the art department.

An 80 by 80 foot gymnasium permits the playing of regulation basketball games. For class instruction in physical education a huge folding wall divides the gymnasium into two parts, each capable of accommodating large groups of boys and girls in separate activities. Folding bleachers accommodating 300 persons can be pushed back against the wall when not in use or drawn forward to supplement the seating capacity of the balcony overhead.

A cafeteria that seats 186 persons is available throughout the day for use as a study hall.* This large room is built upon a semicircular plan that provides an abundance of natural light. The semicircular construction of the east wing of the building constitutes a veritable glass house in which are housed the home economics department, the music department and the cafeteria-study hall.

Built to accommodate 32 girls, the

*A description of the cafeteria appears on page 64.



CONSTRUCTION DETAILS

CONSTRUCTION: Modern architecture, fireproof throughout. Superstructure, steel frame with steel joist. Enclosing walls, brick backed with hollow tile. Roof, twenty year bonded, precast gypsum plank. Windows, stairway, glass block; classroom, steel sash; gymnasium, projected steel sash.

FLOORING: Corridors, stair halls, toilets, terrazzo. Classrooms, asphalt tile. Gymnasium, maple over concrete subfloor. Auditorium, cement. Basement rooms, asphalt mastic.

WALLS: Gymnasiums, corridors, stair halls, toilets, basement rooms, ceramic tile. Classrooms and auditorium, plaster.

CEILINGS: Auditorium and library, acoustical cork.

LIGHTING: Vestibules and lobbies, fluorescent cove lighting. Auditorium, fluorescent strip lighting. Gymnasium, direct flush units. Corridors, direct enclosed glass units. Stage, disappearing footlights.

HEATING: Split system under thermostatic control. Low pressure, stoker-fired steel boilers.

VENTILATING: Air conditioned throughout. Unit ventilators in classrooms.

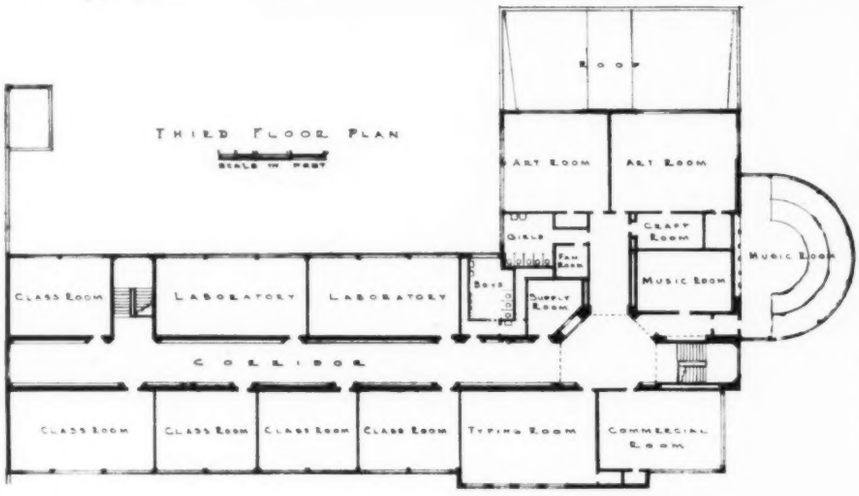
PLUMBING: Individual urinals and closets; vitreous china wash basins.

COMMUNICATIONS: Two-way radio in all rooms.

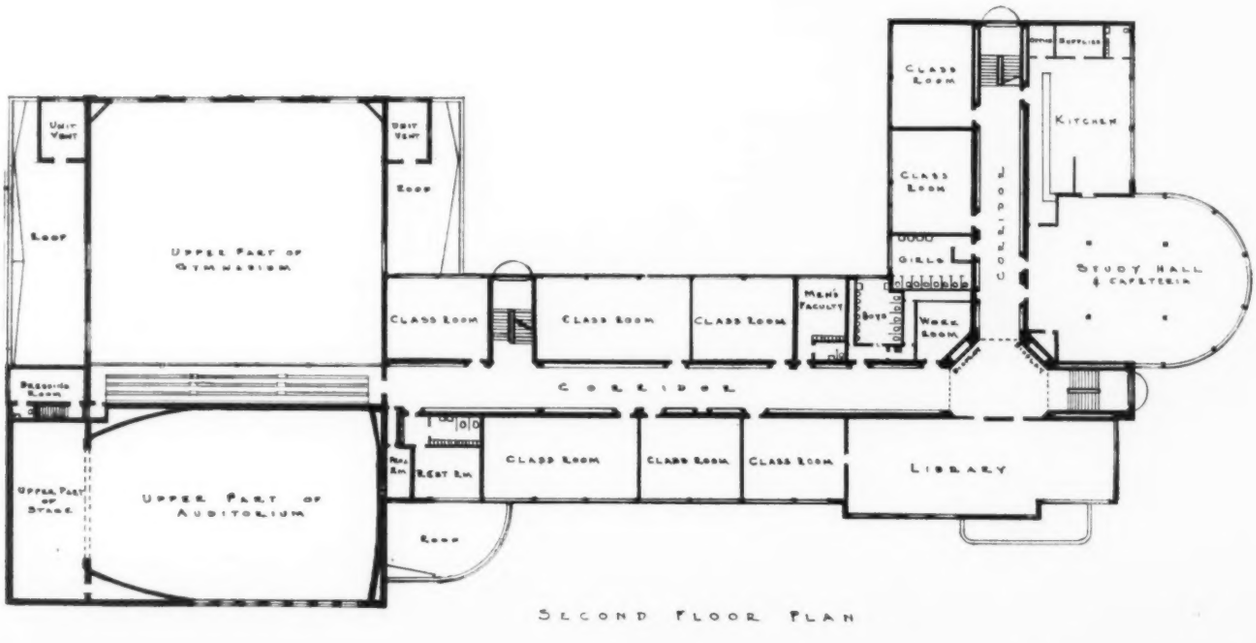
foods department has eight complete kitchen units, with ranges, sinks and electrical refrigerators available in each unit. Adjacent to this department are a laundry and an apartment with interchangeable furniture that can be adapted for use as living room or dining room equipment. The clothing department is furnished with sewing machines, cutting tables, display cases and lockers. A small room off the lower end of the clothing department contains materials for use in the teaching of beauty culture.

The corridor leading into the art department on the third floor is lined on both sides with tackboard. Skylights above the corridor transform it into an art gallery in which the work of the pupils is displayed. On each of the three floors above the ground level indirectly lighted display cases provide an appropriate

Above: Exterior of the James Hillman Junior High School. It accommodates approximately 1200 children and is situated in one of the most populous sections of Youngstown. Left: The art and music rooms and the laboratory are located on the third floor of the building.



Opposite Page: Plan of the first floor showing the semicircular construction of the east end of the building, which houses the domestic science rooms on the first floor and the cafeteria on the second. See second floor plan below. Otto J. Kling of Youngstown is the architect.



SECOND FLOOR PLAN

Above: The domestic science room contains eight complete kitchen units with equipment accommodating 32 girls, each working as if she were in her own kitchen.

setting for all kinds of displays and exhibits. Responsibility for the arrangement of these cases is assigned from month to month to the various departments of instruction.

The chalkboards in the art department are convertible; when drawn away from the wall, they become easels. A craft shop in the art department is equipped with facilities for ceramic art work. A potter's wheel, a glazing kiln and weaving and leather craft equipment are to be found in the shop.

Classrooms are finished in two tones, various sections of the building featuring different color combinations. The auditorium, the foyers and several corridors are illuminated by fluorescent lighting, while each of the stairwells is lighted through glass-brick walls that extend three stories in height. Circular windows in the classroom doors and several large circular exterior windows lend a distinctly modern touch to the building.

The school was built with the need for a community center constantly in mind. To the right of the main entrance, off the foyer, is an appropriately equipped conference room where parent-teacher committee meetings can be held during regular school hours. The room is equipped with tables, chairs and cupboards containing table service for teas. An adjacent small room contains a range and limited kitchen equipment.

The auditorium and the gymnasium are distinctly a part of the building proper but, being located in a wing at the west end of the building, they can be completely cut off from the main body of the structure by drawing gates that are concealed in the ceiling above.

The auditorium, with a seating capacity of 600, is both beautiful and possessed of practical activity value. The floor drops from the rear toward a spacious stage, which has wide entrances that permit the movement of large numbers of children to and from the stage without confusion. Horizontal maroon striping encircles the auditorium halfway up the walls. Imposed upon a light gray background, this striping creates the illusion of an even greater width than is actually to be found in the auditorium. Velvet curtains of deep maroon decorate the windows and a full-width curtain hangs above the stage.

The 34 regular classrooms are supplemented by a print shop, a mechanical drawing room and general shop facilities. Fireproof construction prevails throughout the building. Metal moldings, steel window frames, marble sills and metal chalk trays reduce the wood construction to a minimum. Only the doors and the cupboards in the regular classrooms are of wood.

Built at an overall cost of $469,940.74 ($0.2968 per cubic foot) in a heavily populated section of the city of Youngstown, this school represents a great forward step toward meeting a community's need for an educational plant that is at once economical, beautiful and splendidly adapted to the requirements of the youth of today.

Below: The gymnasium can be divided into two sections with a folding wall. Folding bleachers are shown with one section open and the other in closed position.

Citizens' Advisory Committees

—Have They a Rightful Place?

CALVIN GRIEDER

Associate Professor of Education, University of Colorado

PROFESSIONAL administrators and legally constituted school authorities in the United States have been disinclined, for various reasons, to favor voluntary workers in the administration of local systems of public schools. In pursuing this course they have deprived themselves and their communities of a rich source of ideas, of a broader base of acquaintance with community sentiment and of a potentially significant medium of interpretation.

It is probable that at no time has there been a more "clamantly articulate" demand not alone among laymen but also among educators for greater utilization of local community resources in the educational process. Yet, illogically enough, in educational administration the most valuable resources, *i.e.* human abilities and interests, are neglected.

There is also much ado in these times about encouraging the growth of civic responsibility in the individual and in the neighborhood. Political scientists, such as Follett and Laski, are in accord as to the urgency of restoring to neighborhood groups and to individuals a great share of the responsibility for local governmental concerns, privileges and obligations that have been gradually abstracted on the premise of greater efficiency. In highly centralized France there was, during peace-time preceding the present war, an incipient trend toward decentralization in the administration of education.

Development of Individuality

Although in the United States the tide seems to have set in the direction of more centralization in education, time and opportunity yet exist for the growth of local concern over educational matters, and, of course, some questions will continue to be primarily of local rather than of state or national interest. The future may possibly even see an increase of individuality among schools as increasing emphasis is brought to bear on the use of community resources.

It is not the purpose of this article to advocate, as Hutchins says, "the wholly undemocratic notion that citizens may tell educators how to conduct education . . . ." It is purposed, however, to argue for the destruction of that isolation from community sentiment in which most boards of education dwell, often a hostile isolation. More and more is being felt the need for a bulwark of defense in the local community against attacks on public education, some of which are defensible, some not.

Friends of public education feel that a crucial need exists for a more nearly adequate interpretation of the school to the community and also a need for constantly revealing the community's needs and interests to the school authorities. On the theory that interest and sympathy are based on understanding, any group in charge of the direction of an enterprise should be willing to explore all available avenues that might lead to improved understanding. Nor should it be overlooked that in the "recovery of citizenship," capitalization of community interest in the administration of local schools may well play a leading rôle.

Citizens' Cooperation Sought

In order to enrich the store of ideas and to multiply the human contacts in school administration it is proposed that local boards of education invite the cooperation of citizens of their choice as advisory or consultative committees. The feasibility of advisory committees at the levels of local and state school administration already has been demonstrated in connection with vocational education. No comparable test has been made of the practicability of the present proposal, which seeks to extend to the area of general management what is an accomplished fact in the restricted field of vocational education.

There are more impressive examples of advisory educational committees. The outstanding example in this country is probably the President's Advisory Committee on Education. The Report and Staff Studies issued by this body are important contributions to educational literature. There are other groups with advisory and deliberative characteristics, most of which are engaged with matters of federal or state concern; some have more or less legal status. But it is to England that one must turn to witness the operation of consultative and advisory groups on an extensive scale.

While the scheme of educational administration in England is not strictly analogous to the general features of administration in the United States, it is worth while to summarize briefly the English provisions for advisement.

Citizens Serve as Advisers

In England the educational committee of a locality is merely a part of the council elected for the purposes of local government, whose members may or may not possess sufficient interest and competence in educational administration to operate the local school system wisely. Therefore, the law provides for the "cooption" or enlisting of persons in the community to sit with the educational committee as an advisory board. While the coopted members must be in the minority, they enjoy the same duties and privileges as the elected council members.

No diminution in the powers or responsibility of the educational authorities is implied in the argument for advisory councils. That advice can be rendered with no impairment of the status of regularly constituted authorities may be seen in the example of the famous consultative committee of the national board of education in England. This committee, since its origin in 1900, has published a number of important and influential reports, but none of its recommendations is at all binding upon the national board of education. The powers of the committee are

advisory only. Whatever force its recommendations may carry presumably springs from the wisdom with which these recommendations are designed or from the fortuitous conjunction of circumstances favorable to their adoption. Other committees advise the board on juvenile delinquency, school examinations, teacher certification and other matters. All of these are extralegal; even though the board has delegated some administrative functions to these committees, it has relinquished none of its authority.

Issue Should Not Be Forced

It would be preferable, in my opinion, to eschew statutory mandates for the creation of consulting groups in this country. Rather, let their encouragement be a function of professional leadership. Stimulation and the production of beneficial results on a small scale are more profitable than resort to compulsion, although perhaps slower in attaining high efficiency. It is highly probable that a fortunate psychological moment may have to be awaited in each locality. Certainly, forcing the issue will militate against an advisory plan's achieving success or even its initiation. One of the tests of professional administrative competence is the proper timing of recommendations to a policy-determining board.

Only general suggestions for the membership of local advisory groups can be made. The distribution of interest and ability in the conduct of schools, like intelligence, is probably not correlated with wealth or social status. Let it be noted that interest alone should not suffice as a criterion, even though it is regarded as a *sine qua non*. If not present ability, then at least the likelihood of growth in ability should be looked for in the search for advisory talent. Degrees of competence cannot be readily judged, so that some poor appointments would be almost inevitable. The groups among which good material may be found would almost certainly include parents, teachers, other professional groups, business men, skilled workers and, perhaps, pupils. These suggestions are not to be construed as eliminating from consideration groups not mentioned. Promising material for such an organization often is discovered in unexpected places.

A few of the more obviously vulnerable points in the thesis of this article are analyzed below and brief rejoinders are offered.

1. In the first place, the people of the community elect at stated and regular intervals persons to represent them in the administration of the schools. Would not the erection of advisory groups be an invasion of the rights and duties of legally constituted authorities?

No divine revelation is conferred upon school board members at their induction into office. While they may, in general, be regarded as a competent group, they should welcome, nevertheless, the counsel of especially interested and qualified persons who for one reason or another are not members of the board. There can never be a surfeit of good ideas.

2. The parent-teacher association (as are similar organizations) is a well-established agency that ought to be adequate for conveying community sentiment to the board of education.

The advisory committee proposed in this paper would have quasi-official standing. It would be more selective than the parent-teacher association and handpicked for a special purpose. The P.-T.A. is a more inclusive type of activity and it serves, or has the capacity to serve, admirably as a medium of school interpretation. It also has a special interest in promoting fellowship and social contacts between parents and school personnel.

Must Advice Be Accepted?

3. Would the board of education not feel under an obligation to accept advice proffered by the consultants even when it ran counter to the board's judgment? Would there not be a danger of debasing the profession of educational administration to the status of an unpaid occupation for amateurs?

It must be distinctly understood that the advisory committee would have advisory powers only. Its members would have no vote in matters of board jurisdiction and would hold office at the will of the board, perhaps on an annual appointment or upon special call. The board of education would abdicate not one whit from its position of authority and responsibility. None of the advisory committee's recommendations would be binding upon the board of education.

4. Would not the members of an advisory committee tend to become "meddlers" and give more trouble than help? Would there not be some danger of appointing the "wrong" people to consulting membership, who might then sabotage the board's program on personal grounds?

No machinery of administration can be set up in education or in any other field that will serve as a guarantee against human pettiness and frailty. The successful operation of an advisory committee would depend, as do all activities calling for the interchange of ideas and the cooperation of persons, upon common understanding of purpose and desired outcomes, agreement upon methods and location of responsible action.

It is quite possible that the evils mentioned may develop, but it is equally certain that they are not inherent in the plan. Any plan of operation, no matter how sound, may be maladministered. To obtain personnel of high quality is the paramount concern.

Danger of "Yes Men"

5. Would not superintendents and boards of education attempt to develop advisers of the "yes man" type, who could be depended upon to ratify whatever action the board wanted support for and so vitiate the worth of the group as a consulting committee?

Almost certainly an unhealthful reaction would be observed if school authorities sought, under the guise of promoting advisory service, to cultivate a favorable pressure group, or lobby. The temptation to pack the advisory council would quite probably be present all of the time and extremely compelling some of the time.

In responding to the objection mentioned here, recourse must again be had to faith in the integrity of the professional leadership and the elected or appointed school officials. It should be pointed out that honest adverse criticism, as well as commendation, ought to be sought. There is no need to feel that advisers should represent only the interests that are favorable to the preservation of the school system *in statu quo*.

English for Practical Purposes

FRANK JAMES SINGER
Instructor, Bayonne Senior High School, Bayonne, N. J.

A NEW English course of study is functioning successfully in the tenth grade at Bayonne Senior High School, Bayonne, N. J., one of the largest schools in the United States. This course is not merely a continuation of formal English instruction but is a preparation for what will actually be required of pupils after they enter business.

The entire pattern is built against a background of business experience and practice, with a sound knowledge of English grammar as its foundation. What the pupil learns furnishes him with the connecting link of reality and application between theory and practice.

The chief aim of this course, as set up by a teachers' committee headed by Agnes Cawly, Anne Murphy and William J. K. O'Brien, is the mastery of oral and written English. The course of study has several ultimate objectives. First, the pupil is expected to develop an acceptable scheme of personal living and to become familiar with the best business conduct and usage in relation to employers, co-workers and customers.

Second, during their study the pupils are introduced to literature that will be useful in business to either employers or employes. Their reading also includes literature as a basis for reading for enjoyment and leisure. The comprehension of correct business English is also stressed, as is the correct form of business writing.

Business officials in Bayonne and near-by cities are invited to speak to the pupils in specialized fields. It is at such round-table meetings of pupils and business people that the third and fourth aims are fulfilled. These are to speak English as it is spoken by careful business people and to write the language clearly, correctly and forcefully in social and business situations.

There are also several immediate aims. In grammar, for instance, the needs of the class and those of the individuals are determined at the beginning of the term. Remedial work is based on diagnostic or survey tests. Using the results of the tests as a starting point, the new subject matter is planned to avoid duplication of what has been learned in previous terms. Remedial teaching is inaugurated during the tenth year because the skills learned during this time are to be called into constant use during the eleventh and twelfth years.

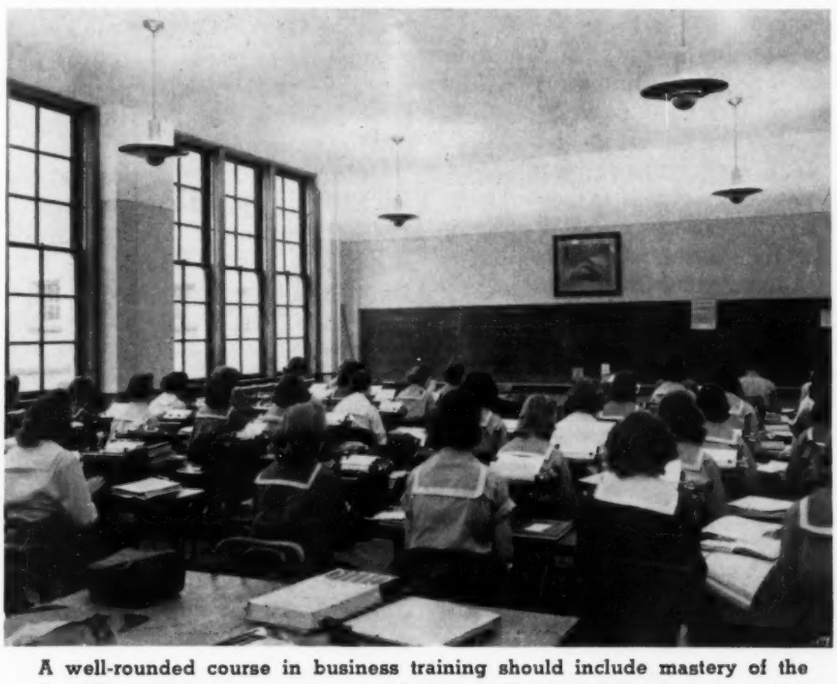
The effectiveness of the teaching of both the remedial work and the new subject matter is checked by setting up certain goals for the correlated portions of the course of study. The pupils, properly motivated, attempt to attain these goals as soon as possible. The immediate aims for the tenth year are an understanding of the fundamentals of grammar and of correct English usage and the development of the ability to use this knowledge of grammar in speaking and writing.

Oral composition work is accented during the year. Through constant practice the pupils learn the fundamentals of good speech and correct enunciation and pronunciation. They become skilled in selecting, organizing and presenting material; in holding the attention of an audience; in putting their feelings and opinions into speech and in making convincing sales talks. During this process they acquire both a working knowledge of business terminology and an adequate social vocabulary. The proper use of the telephone is also stressed.

Suggested subject matter allows for a wide choice of topics to meet the requirements of the group. The relating of experiences is the most natural form of expression and is considered a safe introductory topic. Subjects for speeches are taken from various sources, including home and school activities.

Written composition work teaches the pupils to write, in the accepted style of business and social usage, letters of application, merchandise orders, remittances, requests for appointments, complaints and thank you letters. They acquire ease of expression and learn to develop a paragraph from a topic sentence.

Topics are assigned that are in the range of the experience of the



A well-rounded course in business training should include mastery of the English language as well as technical skill in shorthand and typing.

pupil. These are the subjects in which he is most interested and with which he will have success.

The establishment of a newspaper that is printed in the school has been most effective. The pupils gladly undertake the responsibility of typing, printing and proofreading the paper after several lessons have been given in class. The best compositions submitted in the course of the class work are included in the paper.

The principal aim of the literature work is to raise the intellectual level of the literature that is chosen by the pupils. What each one reads is of no importance during this year. What is important is that each pupil learns to read something. No required reading list is set up at any time. Suggestions and guidance are tactfully given by the teacher. However, care is taken that the suggested books are on the intellectual level of the individual pupil. Written book reports are not required but class discussions are held. The discussions are easily developed into sales talks on the relative merits of the books read by the pupils.

An exchange library has been set up in the English class by the pupils who bring to school books and magazines that are no longer needed at home. The pupils have worked out a plan so that each one may read as many books and magazines as he desires. A comprehensive selection of periodicals is at the disposal of the pupils in the class library.

The reading of the individual pupils is guided along the lines of their own interests. A multitude of titles that will reach the interests of all in the class is available.

Through the use of various texts, pupils are taught to gather material from many sources and then form their own conclusions. They become acquainted with financial pages, reports and economic writings. They learn to read newspapers and periodicals with understanding and selective judgment as to content, method, editorial policy and reliability. They are able to use effectively indexes, reference books and guides. Finally, they develop a mode of personal living that is in accord with the best standards of the business and social worlds, inasmuch as they are learning how to dress for business, personal cleanliness, correct manners and pleasing personality traits.

Girls' Week at Jamestown

MARGARET ANDERSON

Girls' Counselor, Jamestown High School, Jamestown, N. Y.

THE first Girls' Week program in the senior high school at Jamestown, N. Y., was celebrated May 4 to 11, 1941. The specific objectives of the program were: (1) to help each girl realize her own possibilities for developing her personality and enriching her life; (2) to make the girls in the high school better acquainted, and (3) to unite more closely the home, the school and the community. These objectives were fulfilled.

The plan of the week's program was first announced at an all-girls' assembly on Friday, May 2, at which an interesting and beautiful pageant, written by one of the English teachers, was presented. The pageant portrayed some outstanding characteristics of women who have been successful in their chosen careers.

Girls' Week started on Sunday, May 4, which was called Girls' Day in the Jamestown churches.

Monday was Personality Day. The boys and girls of the high school were invited to come to the auditorium after school to hear a panel discussion on personality. The panel was made up of a boys' counselor, four boys and four girls. The boys discussed "Qualities in Girls That Boys Like." The girls discussed "Qualities in Boys That Girls Like." A thousand pupils attended the meeting and enthusiastically expressed their views when the discussion was opened to the audience.

Parents' Day came on Tuesday. A large group of parents and daughters met in the high school auditorium at 7:30 p.m. to hear and take part in a panel discussion on "Problems of Modern Parents and Daughters." The panel was made up of six mothers, six daughters, two teachers and one college professor. Among the problems discussed were: earlier hours for starting and closing dances; the need for recreational centers for high school pupils; the desire of the young people for closer understanding between parents and children, and the desire of the parents for information concerning the school activities and courses that their children are pursuing.

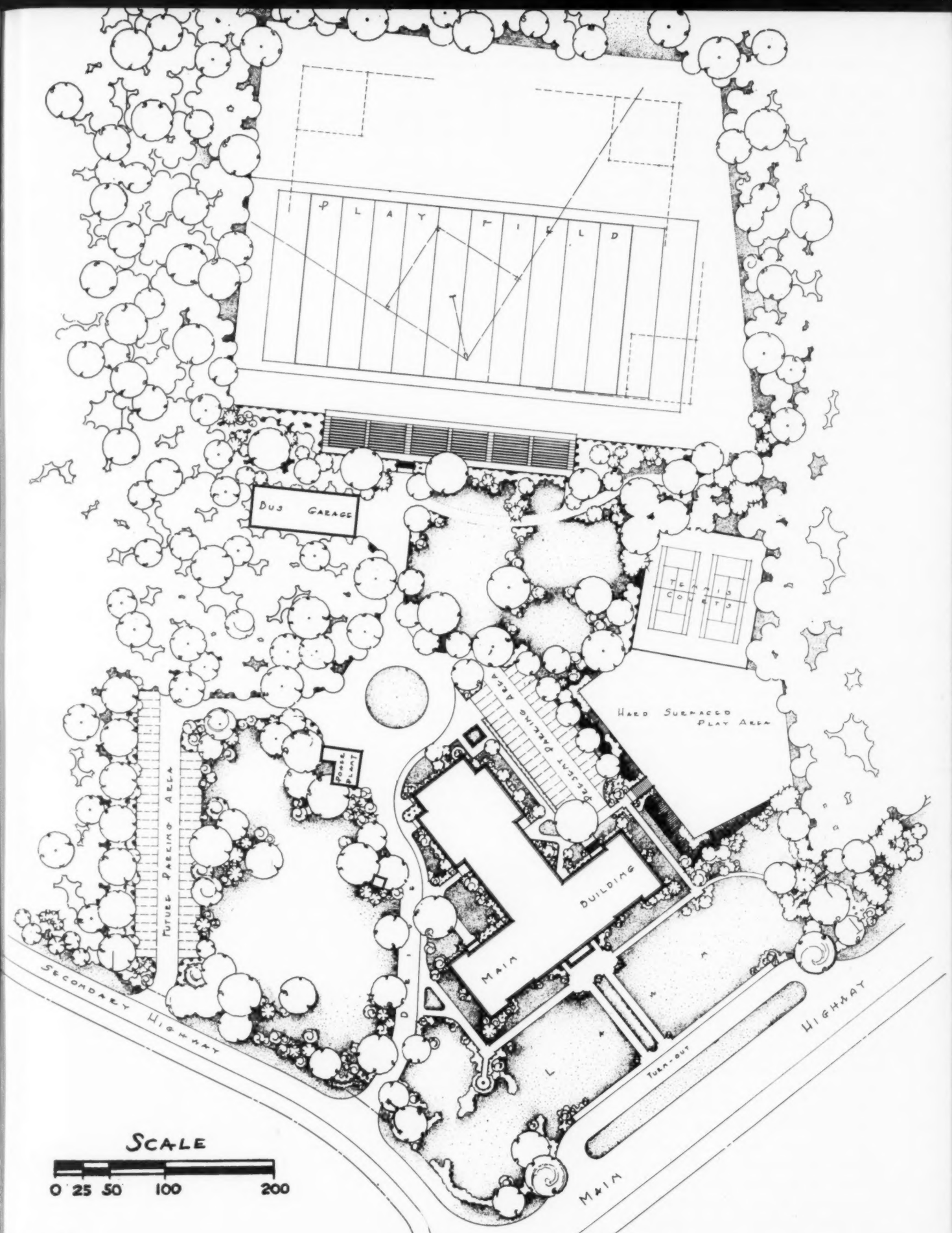
Approximately 900 senior and junior high school girls and parents met in the auditorium on Wednesday afternoon, which was Career Day, for a talk on "Careers of Work for Women." Following the talk the girls went to different classrooms where members of the Zonta and the Business and Professional Women's clubs discussed the personal qualifications and educational training that are necessary for success in various vocations. Twenty-five of the major occupations for women were presented.

An outstanding event of the program was the mothers' and daughters' banquet on Thursday evening. Six hundred girls and mothers attended the first banquet of this kind ever to be held in the Jamestown High School. The program, which was held in the cafeteria, consisted of greetings to the mothers and daughters by the principal and a style show that was presented by the home economics department. The girls in the clothing classes modeled the clothes they had made during the year.

Recognizing the need for cultural and leisure-time activities, Friday was designated as Hobby Day. Throughout the week numerous and interesting hobbies of pupils and faculty were displayed.

The crowning event of the week was the model school dance that was held on Saturday night in the gymnasium. The pupils requested that the dance should start and end early and so the hours were set from 8:30 to 11:30 p.m. This was a program dance to which the girls invited the boys. The receiving line was composed of the guests of honor for the evening. Music was furnished by a 10 piece orchestra made up of high school pupils. An impressive ceremony marked the crowning of the queen of Girls' Week. The queen, who was selected by ballot, was the vice president of the senior class and chairman of the Girls' Week program.

The program concluded on Sunday, May 11, with Mother's Day. The week was a full one for pupils, teachers and parents.



SITES and LANDSCAPING

Preparing a Plan

JOHN McFADZEAN and ROBERT E. EVERLY

Administrative Assistant, Glencoe Public Schools, and Superintendent of Parks, Glencoe, Ill.

FUNCTIONAL planning of elementary school buildings has been much in evidence during the last five years. Educators and members of boards of education have become more sensitive to building needs in terms of their particular programs. The planning of buildings has centered around such considerations as curriculum, flexibility, utility, operation, maintenance and safety. Teachers, parents and children have had a voice in planning cooperatively with administrators, educational specialists and architects. This trend is most encouraging.

Unfortunately, functional planning has been confined to the four walls of the school plant. Comparatively few examples exist to indicate that consideration has been given to the possibilities of planning the school site to facilitate the modern program of education. However, functional planning of the school site is just as essential as functional planning of the school building and many schools are beginning to recognize the importance of functional design as it relates to site development.

Educators are quick to see the educational values of the well-planned school site in terms of their total educational program but hesitate to present a landscape plan to their boards of education because of the erroneous belief that landscaping is a luxury.

Most boards of education spend more money for school site developments than is realized. When complete planning has not preceded the development, much of the money spent for piecemeal construction is wasted and, thus, the project is costly. There are many examples of expensive changes and reconstruction in the development of school sites because future needs were not anticipated. If a master plan is prepared, the development can proceed as funds are made available, either as a unit or from year to year without waste and with the satisfaction of knowing that the goal of the master plan will ultimately be a reality.

Furthermore, poorly planned and poorly maintained school sites increase maintenance costs. Consider for a moment the "limestone" play areas so typical of the American elementary school. Not only must maintenance on this type of playground begin as soon as the area is put into operation, but it must be continuous thereafter. Furthermore, the small chips carried into the school building on the shoes of children cause more floor replacements than does any other single factor. The abrasive action of this material is particularly hard on linoleum floors.

On the other hand, the use of a black top surface on the wet-weather playground will actually pay for itself in two or three years. The approximate useful life of this material is from twenty to twenty-five years, based upon a reasonable maintenance program.

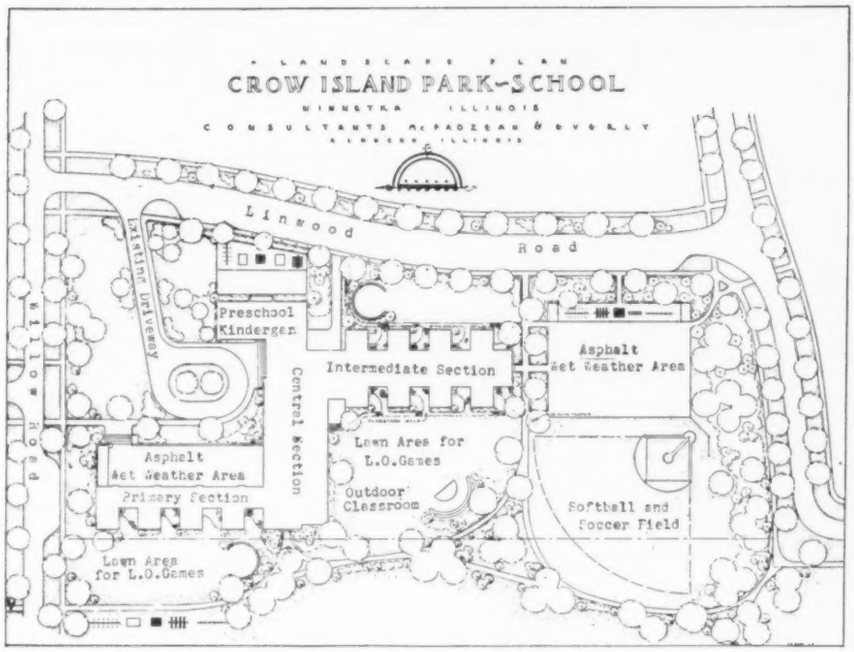
This type of wet-weather play area can be used throughout the year in all kinds of weather and maintenance costs are negligible when it is properly constructed. The surface is ideal for flooding during the winter months and the maintenance and operation costs of a skating pond built on this material are fairly low.

The modern program of elementary education, which is extending educational opportunities beyond the four walls of the classroom, presents many new problems in the design and development of the elementary school site. More exacting demands are made upon the site and planning becomes more difficult. In order to extend curriculum activities beyond school walls, it is necessary to provide for outdoor classrooms.

A small attractive amphitheater built of weathered stone and with seasoned timber seats, for example, with a background of native planting, will be an inducement for the development of an informal program of dramatics. Areas must also be planned on the site for pets and gardening activities. These activities are as essential to elementary education today as the McGuffey Readers were to the schools of the 80's. When space permits, a wild flower or bird sanctuary provides many opportunities for an enriched science curriculum.

The design of the physical education and recreation area must be planned in terms of the local program. Many factors influence the design of a particular school site.

There are definite aims and guiding principles but the educational



philosophy of the school will dictate the final layout of the site.

Consideration must be given to both group and individual needs. Segregation of age groups and their requirements must be one of the guiding factors. The plan of the Crow Island Park-School, Winnetka, Ill., is ideal from the standpoint of segregation. Each age level enjoys a wet-weather playground, apparatus area and a turf playing field for games and sports. When complete segregation is not possible, little children should be segregated.

The school site also plays an important part in community recreational programs. The area should be designed and developed to serve not only the needs of the school physical educational program but the recreational requirements of the community. When the size of the school site is limited, park boards and school boards should be encouraged to acquire adjacent properties and develop these areas as a unit. Through cooperative planning adequate facilities for all age groups can be developed with real economy.

For example, sand-finished asphalt wet-weather play areas not only allow a more flexible physical education program for a greater number of days during the school year, but, when properly constructed with concealed galvanized iron sleeves, can be used by the community for tennis, volley ball, badminton, shuffleboard, paddle tennis and deck tennis. Lines for these activities can be painted on the courts and the material is resilient, nonabrasive and economical to maintain.

The safety of all groups using the facilities of the school site must be given every consideration. The apparatus area should be located near the preschool and primary sections of the building. The walks leading to this area and to other facilities on the school site should be at least 6 feet wide and constructed of asphalt. This type of walk is resilient, nonabrasive and safer in winter than any other type of construction. The use of a tanbark mixture under all apparatus will eliminate to a marked degree the accidents that frequently occur in these areas.

The apparatus should be of the nonmovable type, with the possible exception of swings and teeters. In the interest of safety, the composition belt swing seat should be used. The sand boxes should be enclosed with a low link fence and gate to keep out the animals. Water outlets should be placed near the sand boxes to allow for sprinkling during the dry seasons of the year.

With the exception of tennis court and baseball backstops, the natural barriers of native plant materials will give adequate control of the school site. Furthermore, the use of trees, shrubs and flowers indigenous to the region will play an important part in arousing interest and stimulating a desire on the part of children for beauty and order. No single factor has created more difficulties in the field of school public relations than the problems that arise when the school site shows evidence of poor planning and unattractive surroundings. Properly designed and maintained school sites can actually increase the value of property in the vicinity of the school. This sustained or increased valuation will more than pay for both the original and the maintenance costs of such developments, particularly in suburban communities.

There is no longer any sensible reason why the selection and development of a school site and the building of a new school should cause discussion and strife.

Opposite: Transplanting wild flowers from greenhouse to sanctuary. Below: Asphalt wet-weather play area with tanbark apparatus area.

C. M. MILES
Supervisor of Physical Education and Recreation
New York State Education Department, Albany

Recreational Areas

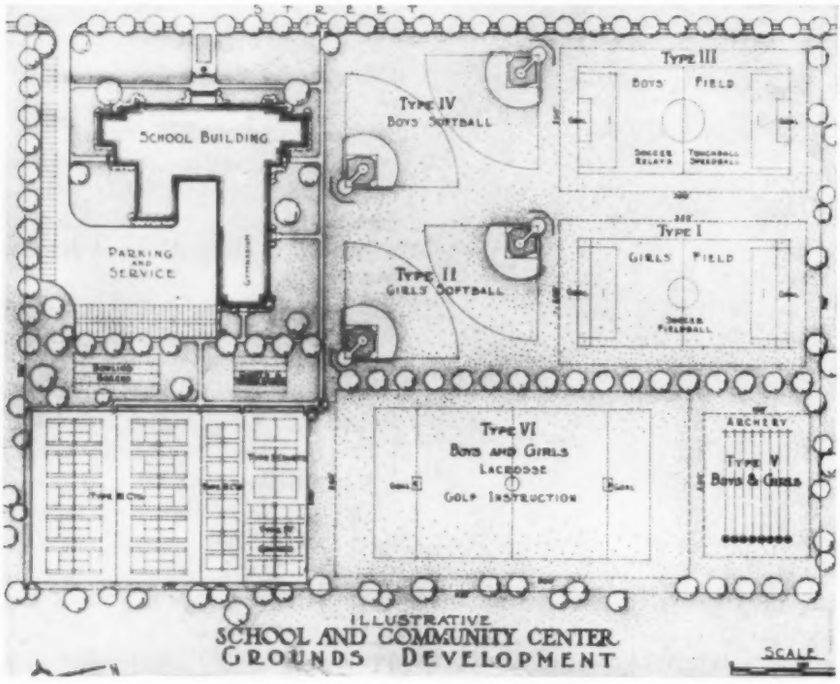


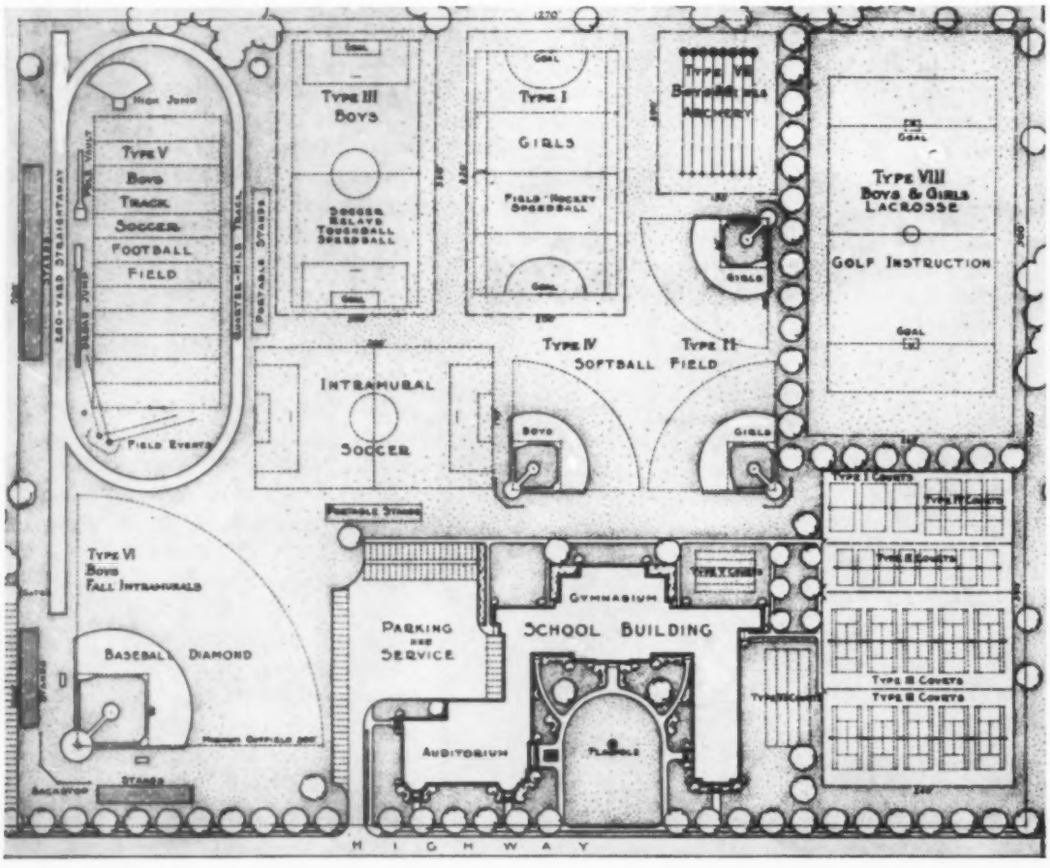
Chart illustrating grounds development recommended for a junior high school. Charts and plan prepared by A. Carl Stelling of the firm of Sheffield A. Arnold, Inc., New York, landscape architects and site planners.

OUTDOOR space requirements or standards for elementary, junior and senior high schools should be based upon the areas needed for a program of physical education that meets the needs of all the pupils and a program of recreation that serves these children during school vacation periods. The use of these facilities to capacity after 5 p.m. for out-of-school youth and adult groups in the community must also be considered in setting the standards and planning the areas.

Space requirements should be based on a program of activities rather than on a specified number of square feet for each pupil in the school for the following reasons:

1. Many activities, such as baseball, football, soccer, hockey, tennis and softball, have nationally accepted rules and space requirements which are the same for the small as for the large school.

2. Good program planning requires a progression from some of



Grounds development recommended for a senior high school. Court areas are organized according to types and are large enough to serve fairly good sized groups. It should be noted that type 4 area is scheduled for dual use by boys and girls. This is done in order to provide a large enough area for lacrosse for the boys and for the girls separately and also to provide an area large enough for golf instruction in driving and pitching.

Table 1—Court Areas for Senior High School

Type	Games	Number Players per Court	Number Courts	Total Number Players	Average Number Players	Size Court	Area Size	Space Required Sq. Ft.	Space Required Acres
I	Captainball	14	3	42	42	30x60	50x80	12,000	.27
	Newcomb	16	3	48		30x60			
	Volley ball	12	3	36		30x60			
II	Badminton	4	8	32	32	20x44	30x64	15,260	.32
	Paddle tennis	4	8	32		20x44			
	Deck tennis	4	8	32		18x40			
III	Tennis	4	10	40	40	36x78	55x120	66,000	1.70
	Ice skating in winter								
	Group games when ground is wet								
IV	Handball	4	8	32	32	20x34	40x44	14,080	.30
	Squash tennis	4	8			22x36			
	Squash racquets	4	8			22x36			
V	Quoits	4	5	20	20	25-40*	20x74	7,400	.17
	Horseshoes	4	5	20		25-40*			
VI	Lawn bowling	6	4	32	32	14x110	60x120	7,200	.17
	Landscaping, circulation, safety							10,000	.23
	Totals				128			131,940	3.16

*The stakes can be set 20 feet apart for use by boys and men, and pitching lines can be marked at different distances to suit children (25 feet), girls and women (30 feet).

the more simple to the more highly organized games, thus making it necessary to plan the areas so that they can be used for the wide variety of activities included in the modern program of physical education and recreation.

3. Effective teaching of the skills and technics for a specific activity, and the equally valuable concomitants, is largely dependent upon having enough pupil stations of the different types of areas to serve all pupils in the school. Since school schedules, classroom size and teaching loads have been based on serving classes of about 35 pupils, it is reasonable to follow this practice in providing space for physical education classes. A class of from 32 to 40 pupils scheduled for tennis, for example, would require a battery of eight or ten courts to provide a space for each pupil to work.

4. Effective participation in intramural or physical education laboratory periods calls for an adequate number of different types of areas to satisfy the peak load of pupils who, because of the widely accepted practice of scheduling, must participate in these activities after the close of their regular class periods in the afternoon.

5. Effective use of these facilities in meeting community recreation needs is largely dependent upon having a sufficient quantity and variety of areas to attract and serve enough individuals after 5 p.m. and during school vacation periods so that operation is economical. The board of education has a social obligation to make these facilities available to the community.

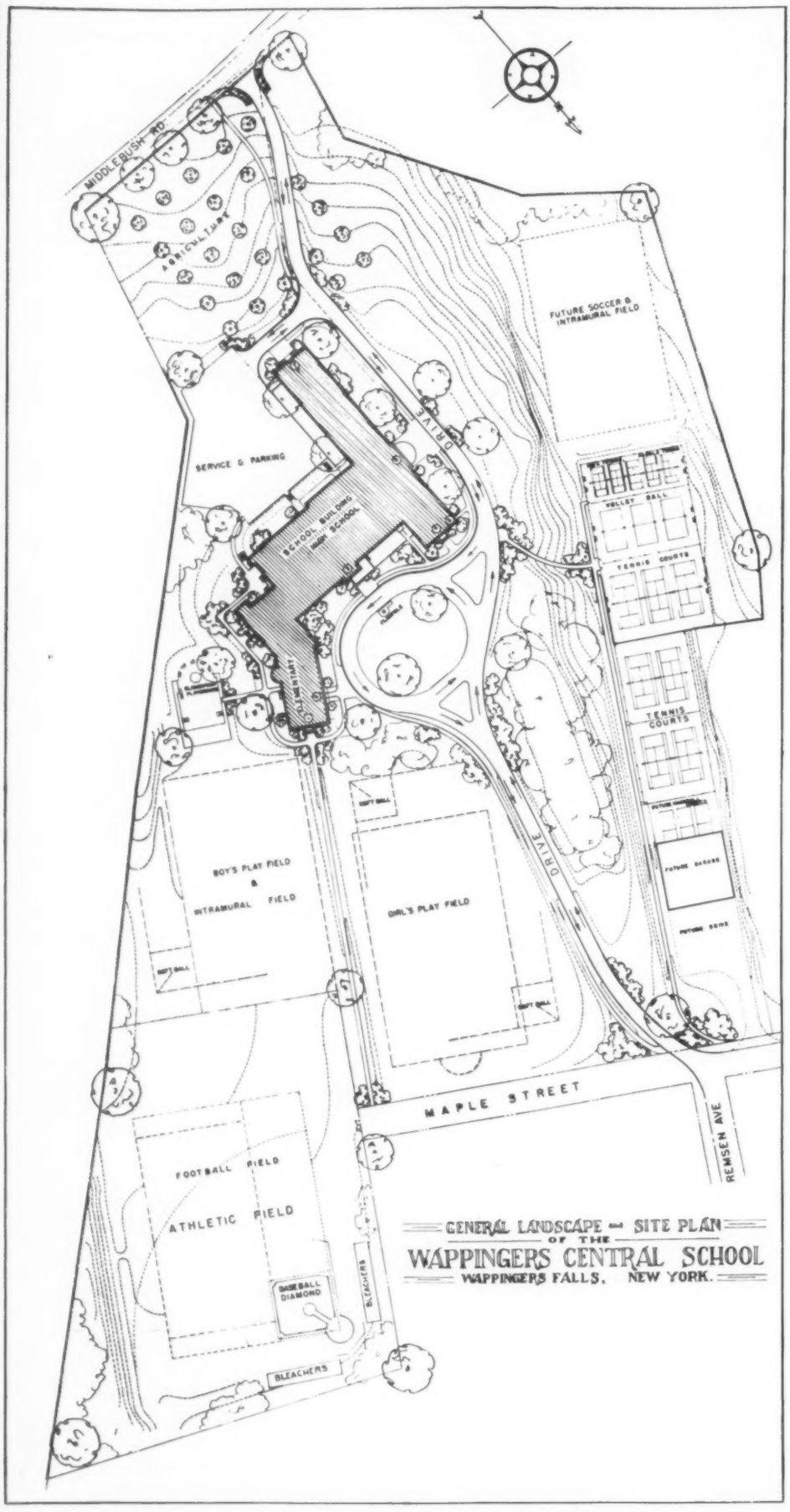
Outdoor areas that are functionally planned for physical education and for recreation activities are not costly when compared to teaching space within the building. In most cities and villages there is usually a choice of several sites with considerable acreage. It is generally possible to purchase a large site at the edge of the city for the price that would be paid for a few blocks in a congested area.

Since additional land adjacent to school buildings that are already constructed will cost more and less land will be available, the main hope of providing adequate outdoor teaching space lies in selection of sites for new schools. Prices vary considerably over the nation. However, the fractional cost of a 20 room high school building that is allotted to two classrooms would, in general, be sufficient to purchase an adequate space for outdoor physical education and recreation areas.

The unit cost of outdoor areas, which is based upon participation hours, can be greatly reduced if these areas are used by the children for recreation during the summer months as well as for physical education during the school year. Further reductions in this unit cost can be made by the use of these facilities by out-of-school youth and adult groups.

The dual use of these areas by both school and community groups makes it possible for the community to provide more adequate physical education and recreation areas for both groups on space adjacent to the school, which, as a rule, is conveniently located as to population centers. The construction of separate centers for these groups at widely separated points often ends with inadequate facilities for both groups. The city or village can provide more adequate child and adult recreation facilities by planning for the recreational use of school centers as a basic area requirement and the development of such supplementary areas as are needed without an unreasonable increase in present budget allotments for this purpose.

Court Areas: These areas should include courts for such games as tennis, handball, captain ball, badminton, deck tennis and volley ball. These courts can be organized according to types and planned to serve a fairly good sized class in any one activity. Technics for tennis and other court games can be taught just as effectively as baseball, basketball and football provided there is space for class instruction and practice in these activities for all pupils. There are enormous possibilities for increasing the recreational use of these activities if adequate court areas can be provided for effective instruction and practice during school periods and for recreational use in various out-of-school periods.



Master plan of the grounds at Wappingers Falls Central School shows provision made for athletic field and also for play areas for both boys and girls. A playground is also allotted for the use of elementary school children with space included for playing various group games, such as dodge ball, mass soccer and long ball.

Since there is little variation in the size of the physical education classes in the small school (200 pupils) and the large school (700 pupils), the courts listed in table 1 should be provided for the small school. Additions should be made to the number of each type of court area if the school enrollment increases beyond 800 pupils. The provision of a large number of courts in one area increases the efficiency in the use of these courts by both school and community groups.

Paved surfaces for these court areas, such as asphalt or other suitable types of surface, increase their usefulness because a paved surface can often be used when a clay surface would be too wet.

Court lines can be painted in different colors for the various games listed for each type of court. Such lining of the courts will increase the effectiveness of class instruction and practice in developing the technics of the game and sportsmanship.

Girls' Area: This area should include a large open space available for such games as field hockey, soccer, speedball and softball. It should be near enough to the building so that it can be used by the physical education classes and for afternoon laboratory physical education and recreation activities. The size of the space should be sufficient so that the largest number of girls scheduled for any one period can be served adequately. A special plea should be made for including the girls' area in the plans because in traditional practice it has been omitted, and the girls have had to use some auxiliary field or the athletic field when it was not needed by the boys.

Boys' Area: Two groups must be provided for in this area: (1) those who participate in intramural sports only and (2) those who participate in interschool sports.

The intramural space should be

provided for such games as touch football, soccer and speedball. This area should be near enough to the school building to be used for class instruction and for afternoon laboratory physical education and recreation activities. The space should be large enough to accommodate the largest number of boys scheduled for any one period. The peak loads for the intramural area occur at activity periods during the school day or in the afternoon after the close of formal classes.

The interschool area should be provided for the games that the school officials have selected for the interschool program. Interschool athletics is an integral part of the curriculum. Space provided should be adequate for the activities selected and should be prepared so that players and spectators are protected against unnecessary hazards. The development of these areas should be in proper proportion to other parts of the program so that all groups enrolled in the secondary grades have an opportunity to participate in a selected number of activities. It is recommended, and is becoming generally accepted, that junior high school pupils should not engage in interschool athletics.

Area for Elementary Grade Children: This area should include an open space for group games, such as dodge ball, mass soccer and long ball, for children in the intermediate grades. An area should also be provided for children in the primary grades that should include an open space for group games and a space for selected equipment. Each space should be large enough to accommodate the largest group scheduled for any one period.

The elementary grade area should be included in the high school plan if the site is used for elementary children during summer recreation periods or if grades are included in the high school building.

Plans for facilities must take into consideration the groups that will use them. These may be classified as follows:

Kindergarten and Elementary Grades (Ages 6 to 12)
- Primary children, from kindergarten through the third, or, in some cases, fourth grade.
- Intermediate grades, *i.e.* grades 4 to 6, sometimes 7 and 8; boys; girls.

Junior High School Grades (Ages 13 to 15)
Boys Girls

Senior High School Grades (Ages 16 to 18)
Boys Girls

Recreation Groups (Ages 6 to 60)
Children
Youth: Girls, Boys
Adults: Women, Men
Family and corecreational groups.

Many communities are now providing physical education and recreation staffs and evening programs for out-of-school youth, men of the 21 to 35 age group, defense industry workers and other adults. Each year an increasing number of communities in New York State employ their physical education and recreation staffs for a twelve months' period so that they are available for summer recreation activities. Music, crafts, kindergarten and other teachers with recreational training are added to direct a well-rounded program of recreation during the summer months.

Only functional planning by the community can make such dreams as these come true. The services of well-trained landscape architects and recreational planners should be employed to develop such long-range functional plans so that the community can provide for more satisfactory use of leisure time.

Table 2—Field Areas for Junior High School

Type	*Season*	*Games*	*Number Players per Field*	*Number Fields*	*Total Number Players*	*Players per Period*	*Field Size*	*Area Size*	*Space Required Sq. Ft.*	*Space Required Acres*
				GIRLS						
I	Fall	Soccer	22	1	22	22	150x300	200x350	70,000	1.6
	Spring	Fieldball	22		22					
II	Spring-Fall	Softball	20	2	40	40	45 ft. b.l.	160x160	51,200	1.17
	Landscaping, circulation and safety								15,000	.34
	Totals for Girls					62			136,200	3.1
				BOYS						
III	Fall	Soccer	22	1	22	22	150x300	200x350	70,000	1.6
	Spring	Relays	30		30					
	Fall	Touchball	22		22					
	Spring	Speedball	22		22					
IV	Spring-Fall	Softball	20	2	40	40	45 ft. b.l.	160x160	51,200	1.17
	Landscaping, circulation and safety								18,000	.41
	Totals for Boys					62			139,200	3.18
				BOTH BOYS AND GIRLS						
V	Spring-Fall	Archery[1]	32	1 (8 targ.)	32	32	100x150	150x200	30,000	.7
VI	Fall	Lacrosse	24	1	24	24	210x450	260x500	130,000	2.9
	Spring	Golf Instructor[2]	24		24					
	Totals for Both Boys and Girls					56			160,000	3.67
	Grand Totals for Boys and Girls					180			435,400	9.9

[1]Boys will alternate with girls in the use of the archery range.
[2]Girls will alternate with boys in the use of the golf instruction driving range for irons and pitching greens.

Enter: The Landscape

H. O. WHITTEMORE

THE rôle of the landscape architect in developing the school site can best be described by quoting from a letter in answer to the following question raised by a certain school board: "Will you kindly state whether, in your opinion, it is advisable to employ a special landscape architect in addition to an architect to design the building?"

"It is not customary or desirable for the building architect to lay out and develop the grounds around a building. Modern buildings and their equipment require so much background, skill and detailed information on the part of the architect that he cannot be proficient in that and also have the broad knowledge, skill and information that are necessary to the development of grounds, approaches, play areas, plantations and woods.

"The proper procedure is to employ a trained landscape architect who has had school ground experience and who understands building architecture well enough to collaborate closely with the architect in locating and establishing grades for the building and developing what will finally be a well-coordinated scheme of both building and grounds.

"In order to achieve this fine coordination it is necessary that the landscape architect be employed at the same time as the building architect so that the plans for building and grounds can proceed simultaneously, and so that the total estimates of the cost of both building and grounds will be in the hands of the board of education at the same time. This will protect the budget from being overburdened or, conversely, will ensure that a sufficient amount is asked for from the school district.

"A landscape architect should be employed for the same reasons that a building architect is employed to design the building: First, the landscape architect has the necessary training and skill to plan the grounds in such a way as to have an 'artistic and efficient arrangement of the open area to secure the maximum satisfaction in human use and enjoyment.' Second, only he has the knowledge of detailed methods of landscape constructions and gardening that are necessary to achieve permanently satisfactory results. Third, he only can advise as to the best methods of maintenance at the lowest cost. Fourth, he only possesses information regarding detailed costs of the work that is needed to give an accurate estimate of the appropriation that will be required. Fifth, he only is in a position to uncover ways of economizing without injury to the final results."

Thus, it can be seen that in many worth-while and important projects, such as the development of a school building and grounds, a considerable amount of study and preplanning must be done before a single shovelful of dirt is turned or even before the first blueprints are made or the appropriation is authorized by the school district.

Assuming that the educational authorities, after a study of the spread of population and of city development, have determined that a new school is needed in a certain locality, there arises the question of the choice of an exact site. This should be made only after a careful examination of all available sites by a group composed of the educational authorities, the consulting architect and the landscape architect. This group will have already made up its mind as to the size and character of the building, its major functions and the amount of open space needed to provide for the outdoor activities of the school.

Each site considered will need to be planned in imagination by the members of this group in close collaboration with one another, the city plan commission or the city engineer's office. The site finally chosen will then assuredly meet all of the needs that will arise; there will be ample room, the shape of the area will be convenient and the building site will be proper and economical.

The planning group should then proceed to the plans of buildings and

This group of pictures of two high schools at Jackson and Flint, Mich., illustrates the fine results that can be achieved by thoughtful long-range planning of school grounds.

Architect

Department of Landscape Architecture
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grounds and the landscape architect's rôle is to help establish building grades and location, to advise as to the disposition of excavated soil and to see to it that all approaches, play areas and other outdoor activity spaces are properly provided for and conveniently located. He must also see to it that the setting of the building is such as to make it impressive and dignified and to preserve and enhance the beauty of its design.

When the building is located and its plan determined, the landscape architect can detail his plans to provide for each activity area so that they are distinctly separated yet conveniently connected and designed for the most efficient use. This includes provisions not only for the total number of pupils and teachers using the grounds, but for safety and good health. In regions where the climate is severe or uncomfortable, with long, cold winters in the north, or intense heat and sunlight in the south and west, the landscape architect must make his plans to alleviate these conditions, to encourage the pupils to play and exercise out of doors as much as possible and to promote better conditions for study within doors.

It is unfortunate that so many people think that the landscape architect's rôle is merely to beautify the grounds with trees, shrubs, vines and grass so that he is often employed only to do that. The result is exactly the same as if the architect were to be called in only to paint the woodwork or hang the wall paper after the building is built. This is not to deny that beauty in a school ground is important. It can contribute greatly to the cultural development of the child, to the dignity and impressiveness of the school and to the formation of an esprit de corps.

Beauty cannot really be considered apart from function, however. A perfect design for the best use of the school will already possess the major elements of beauty so that a minimum of "decorative" treatment will be necessary. If he is called in late, the landscape architect has to do a great deal of extra planting and walling to conceal a bad job of fundamental planning that could have been avoided at no extra cost.

From the point of view of the board of education, the landscape architect is of great service in estimating the cost of the development so that the budget can be set up and adhered to. Without that the taxpayers may have an unexpected request for more money or else some vital activity may have to be left out.

Good, permanent construction requires proper and continuing supervision from the very start. Maintenance of the school grounds is one of the most difficult problems that faces the board. The "wear and tear" is great and the landscape architect should be retained on an annual basis to observe and to advise on how to meet conditions as they arise. Plantings do not have the tender solicitude of the home gardener, and semiannual attention should be given to the plant materials.

FRED P. REAGLE
Assistant Superintendent
Board of Education, Montclair, N. J.

Drama Outdoors

THE school system of Montclair, N. J., has been fortunate for many years in having use of a beautiful open air theater. It is located on school property adjacent to the high school building in an angle formed by two wings and is so screened by shrubbery that one driving by on the street would not be aware of it.

The theater was developed in 1916 by a lay committee that included members of the board of education. Money for the purpose was donated by one of Montclair's wealthy and public-spirited citizens.

The main stage in the foreground, which is large enough to accommodate the entire graduating class of some 400 pupils and others participating in the commencement, borders on a brook that runs lengthwise through the theater. It is possible to dam the water in this brook so that floats or canoes can be used in presentations. The arched bridges at either end are attractive architectural features, from one of which the commencement speaker makes his address. From the secondary stage, which is about 20 feet deep, stairs at the right and left lead to the upper level, which is behind a pergola in the middle background.

In the front of the stage a semicircular shrubbery screen serves as director's or prompter's box. A 6 foot concrete tile is sunk in the turf at this point. There are seating accommodations for 1500 people.

As is the case with most projects of this kind, the finished theater was developed after an interesting experience in which the entire school body participated. The high school was built in 1914 and 1915. In 1916, while seeking some suitable way to commemorate the anniversary of the death of William Shakespeare, the happy idea was reached of presenting an amateur show in the crude setting as it was left after the building was completed. The head of the English department was the producer and the entire school rallied around the effort.

It was a "vaudeville" type of review of the works of Shakespeare under the direction of "William" himself. Witches dancing around a smoking cauldron (the smoke was synthetically made by laboratory students invoked the spirit of William Shakespeare from the cauldron. From then on during the performance, Shakespeare, as master of ceremonies, called for short extracts from his works. These presentations of comedy and tragedy were interspersed by appropriate musical numbers and dances.

The show was presented two afternoons and evenings in this rough setting. The steep, muddy bank on one side was provided with temporary seats made of planks borrowed from the local lumber yards; they were enough to accommodate about a thousand people. The stage was provided with a green background by using tree trimmings fastened on chicken wire strung between properly spaced trees.

The enthusiasm in the town caused by this highly successful amateur undertaking was the motivating factor in the development of the sites as a permanent open air theater.

For a number of years the high school attempted to present an annual spring performance in this amphitheater but uncertain weather conditions made it such a gamble that the idea was abandoned. However, it has been used frequently throughout the years. For instance, the town Fourth of July celebration is held here and last June a Czechoslovakian group gave its annual folklore dance festival in the amphitheater. For a number of summers the town has sponsored weekly evening band concerts.

The high school graduation has been held in the amphitheater for the last four or five years. This affair is held at twilight between 7 and 8 p.m. and is really a lovely occasion. The class marches slowly to the amphitheater from the high school, the boys on one side and the girls on the other. The president of the class and a prominent speaker address the group and then the diplomas are awarded. The setting is most beautiful with the pastel colors of the girls' dresses gradually growing darker as the sun goes down.

"Pay-As-You-Go" Plan

J. J. MAEHLING

Principal, Woodrow Wilson Junior High School, Terre Haute, Ind.

IN the fall of 1931 only one tree had been planted on the campus of Woodrow Wilson Junior High School, Terre Haute, Ind. It was a tulip poplar, the state tree. More than a million dollars had been spent on the physical plant in addition to the cost of the 23 acre campus, but although two sets of plans had been drawn for landscaping the school grounds, neither one had been accepted because of the policy of retrenchment.

Many discussions were held with teachers and pupils in an attempt to determine how to proceed in a program of landscaping. The two sets of plans drawn by the landscape engineers were examined. One called for a planting of evergreens only, while the other involved nothing but deciduous trees. The former plan was, of course, much the more expensive. The building was beautiful, with its tall collegiate Gothic central tower built of Bedford limestone, and it was the hope that some sort of plan could be developed to landscape the grounds and thus bring out the additional hidden beauty.

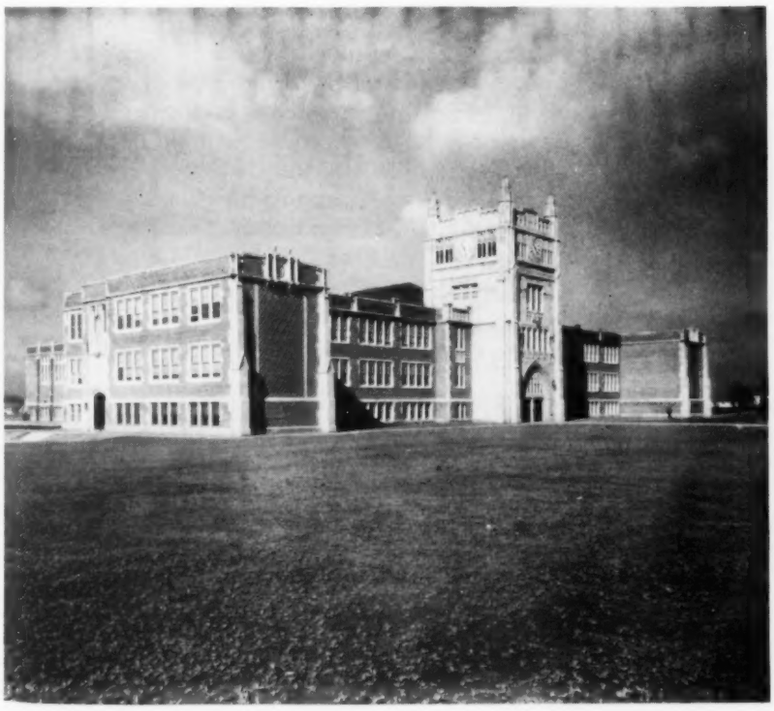
Finally, it was decided to proceed cautiously and let the school earn the money itself. Neither of the previously drawn plans was adopted in its entirety. The finished project is a combination of both, with some new ideas added and certain of the original ones eliminated. In other words, the idea of "pay as you go" was adopted.

During the late fall and winter of 1931 and 1932 the school presented several plays and shows in an attempt to raise money for this particular project. The pupil body had a part in the development of the plan and, as a result, sold tickets for the various undertakings with much enthusiasm. The auditorium in the school is unusually large as school auditoriums go, seating 2200 people, so a considerable profit was realized from each performance.

By the time the spring planting season was at hand in 1932, a considerable nest egg had been saved. This was used to buy trees and shrubs. An attempt was made to put out plants that would grow rapidly and make a good showing as quickly as possible. Such trees as Chinese elms, soft maples, Lombardy poplars and weeping willows, in addition to bush honeysuckle, red bud, and Russian olive were planted.

Both the children and the teachers were consulted about the type of trees and bushes to be planted. Inasmuch as the children raised the money for the landscaping project and also helped to select the trees and shrubbery, they naturally had a pride of ownership in the campus. The nurserymen who put in the planting were anxious to see the development and were willing to guarantee the life of trees and shrubs.

Below, Left: Woodrow Wilson Junior High School, Terre Haute, Ind., as it looked before landscaping program was started. Right: Same school—but what a difference! Trees, grass and shrubbery have made the building one of the "show" places of Terre Haute.



By the late fall of 1932 additional money had been raised and more trees and shrubs were set out and by the following spring funds were available to provide some evergreens that were placed so as to enhance the natural beauty of the grounds. Several of the homerooms had competitions to raise money to purchase trees and shrubs for the landscaping.

At the same time blue grass seed and white clover seed were sowed in quantities to bring quick results. Also, some 50 Boston ivy plants were placed about the base of the building and with proper care these made an excellent showing in two years' time.

Since the soil on the school campus had been filled in it was naturally in need of fertilizer and that was the next thing attempted. Large quantities of well-rotted cow manure were put on the ground in the late fall of 1933 and allowed to enrich the soil all winter. In the spring this was raked up and used around the plantings of shrubs and bushes.

Each fall and spring additional trees and shrubs were planted and, in accordance with the guarantee given by the nurserymen, the very few that did not prosper were replaced free of charge. The lawn was reseeded each February and August in an attempt to obtain a beautiful velvety effect. Every second year manure was put on the soil until a rich surface was developed.

During the years the tradition of a "pupil owned" campus has been handed down to each succeeding school generation, so that little discussion on the part of the faculty is necessary to get the children to keep the lawn in good shape at all times.

Today the results of this labor are manifest. The first trees and shrubs put out are now quite large and those that were planted later are developing rapidly. The lawn has become beautiful indeed and the campus as a whole is generally considered one of the "show" places in Terre Haute.

While it is unquestionably the responsibility of the board to pay for such improvements, we feel that the procedure described has brought about many excellent results. The pupils certainly have an entirely different attitude toward the school grounds than they might have had.

In the process of development it has been our endeavor to plant as many different kinds of trees as will grow well in central Indiana. As a result the school ground is a genuine laboratory for classes in biology and general science. In fact, various "outside" groups come to examine the unusual specimens now on the campus.

Although it is not now necessary to add many trees or shrubs each year, there will always be some expense of upkeep so that each new generation of pupils is reminded of its part in the building of a good landscaping plan for the school. In all, approximately 325 trees and 2650 shrubs and bushes have been set out, in addition to the sowing of 2100 pounds of blue grass and clover seed.

Economies in Planting

PROPER planting will do much for school properties. Poor planting, on the other hand, will only prove wasteful and extravagant. Association, interest, experience and knowledge of plant materials under various conditions help the designer to obtain results that are lasting, pleasing and economical to maintain.

Outlining mass planting to harmonize with the building foundation is desirable, for example, but instead of numerous small curves it is far better to have one or two that embrace one side or exposure. Many times, too, it is preferable to have the grass grow up to the foundation rather than to have continuous planting. Too seldom are straight lines used to outline planting groups. These are quite appropriate for public buildings and are the least expensive type to maintain.

The elimination of narrow strips of grass that are invariably hard to keep cut and trimmed is another factor to be considered. Operating costs can also be reduced by utilizing suitable ground cover plants. These grow profusely, do away with the need for cultivation and conserve moisture. For economy's sake, too, it is better to use a few large plants rather than small ones that must be moved and clipped.

Plants should be selected with the design of the building always in mind. How inappropriate, for example, are tall, narrow evergreens, such as cedars, on the sides of a doorway of a tall building. Instead of tying the building in with the grounds, it makes it appear even taller. On the other hand, horizontal growth or a rounding mass can be most effective. If height is desired, an occasional vine will tend to bring the foliage up in a graceful manner. Fleece vine, wisteria, trumpet creeper, English ivy, small leaf ivy, Virginia creeper and climbing hydrangea are typical.

A building designed with simple lines should have planting that is in keeping. Perhaps a rounded mass of evergreen foliage at the entrance and a group of native flowering shrubs will provide the proper effect. If the building is long, smaller shrubs between window groups will be welcome.

Large buildings require planting material that is in proper scale, or, at least, that will develop to scale. Large wall spaces and long horizontal lines should be broken. It is better to omit one shrub or all, however, unless they are definitely needed. Planting can easily be overdone.

As a rule, plants with fine texture, that is small-sized leaves, should be planted in the foreground, gradually working back to the coarser types. This is especially true of border planting. Stone buildings or irregular foundations demand coarse foliage and irregular growth. But perhaps the most pleasing arrangement is accomplished by grouping together a number of suitable varieties with foliage of slightly different texture. The selection of these and other plants, of course, will be determined by the type of soil and exposure. One plant that does poorly will detract from the whole effect.

Finally, to assure success in school planting, there must be a plan. It is difficult, if not impossible, to plant a part of the school grounds without definite knowledge as to what is to be done with the whole area.

City School Sites

CHESTER F. MILLER
Superintendent of Schools, Saginaw, Mich.

CITIES are made beautiful by deliberate planning. In nearly every well-planned community some individual, years ago, had a vision that other citizens perpetuated. Now, the public looks more to its public institutions to train future citizens to appreciate and perpetuate the beautiful as well as to demonstrate the possible outcomes where all can see.

Civic consciousness for the beautiful is contagious. Plan lovely school surroundings and the neighborhood begins to follow the school's example. Teach children to appreciate and respect the school's grass, shrubbery, flowers and trees, and they will respect their neighbors' and their own. The outcome is an important step in teaching citizenship.

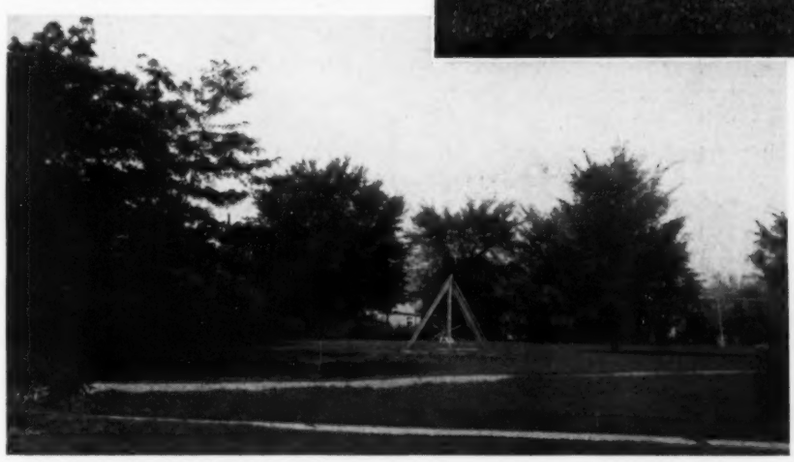
The public's first inclination is to resist a program of school beautification. Often a board of education disregards the majority and plans fine schools and nicely landscaped surroundings only to find that the most active opponents to the plans are the most enthusiastic when the project is completed. We have seen the bitterest opponent of school beautification show "our beautiful school grounds" to out-of-town visitors with pride.

A fire in a section of Saginaw, Mich., destroyed a school in which the enrollment was one third Negro, one third Mexican and one third white. When the new building was planned, the board of education met the criticism that the building was "too good" for that section of the city. We maintained that the first step in improving the section was to build as fine a school as could be found anywhere in the city. The building was erected. Then came the question of trees and shrubbery. Even the board of education questioned the expenditure. With a donation from the highway department, however, the plans were carried out.

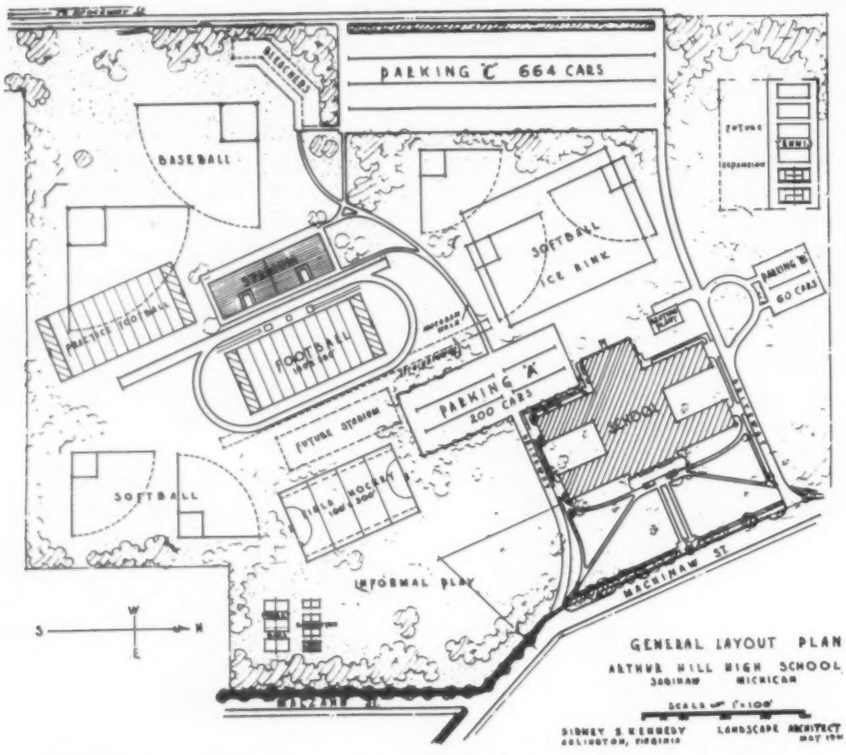
Twelve years have elapsed. This building has been respected more than those in other sections of the city. There have never been marks on the walls, broken windows or other evidences of misuse. Shrubbery, trees and grass have been watered and tended during vacations by the people of this section. Citizens whose language difficulties make them hardly understandable call over the telephone to tell school authorities of any evidence of destruction. This building and its grounds have had as much to do with teaching citizenship as all our efforts in the schoolroom.

A school is more than a place to hold children while they are taught the required minimum of subject matter. Today, we recognize that school means an opportunity for social growth, a living of adult life in embryo, a place in which children can practice democratic living as they must live it later. It is even the laboratory in which influences can be exerted to improve our democratic way of life. If the school is an institution to give children a mastery of the tools of democracy, it should not be necessary for them to wait to enjoy the green grass and beautiful flowers in pastures far removed.

Education thrives best in the restful situations that nature provides. Yet landscaping may be emphasized so much that it fails to serve its purpose. In one city, for example, the landscaping was beautifully done by an expert and the entire cost was paid by a wealthy citizen with the understanding that children would not be allowed to play on the grass or near the shrubbery. The acceptance of this gift by the board of education meant that children must keep to the walks and use basement playrooms because there was no other place to play. While the surroundings were beautiful no one enjoyed them and the result was an artificial situation that curtailed rather than aided the school program. Today, both enjoyment and free play are the basis of the school landscaper's plans. In the medium-sized city, there is



Below: The Tappan Junior High School, Ann Arbor, Mich., showing south end of children's playground. Right: Flint High School, Flint, Mich., seen from the south.



Plan of the site of the new Arthur Hill High School at Saginaw, Mich.

little excuse for constructing buildings on a "postage stamp." Land is not expensive. Even the purchase and removal of buildings are not expensive. It sometimes takes much resistance on the part of the board of education and the administrator to keep a building out of some politician's "back yard" but it is worth the effort.

School planning and city planning should be combined not only for beauty but for economy. The school plant should be planned as a community center for the section of the city it serves every day in the year, with school and city recreation authorities cooperating in the program. A survey of the situation will reveal facts that will convince the citizens of the efficacy of such a program and they will, in turn, hold the future officials to its findings.

Ten years ago, as a result of a survey, recommendations were made for the reorganization of the entire school plant in Saginaw and the relocation of many buildings. The purchase of additional areas where they were needed was also recommended. We thought we were planning far into the future. Depression came; land was cheap. Some prospective sites reverted to the state for taxes and federal aid was available. Eleven building units have been constructed and additional playgrounds acquired—all following the recommendations of the survey. Without a long-range plan in which the people had confidence, it is doubtful if this could have been accomplished.

Our most pretentious plan was the building and relocating of two high schools. One is not yet a reality. The old Arthur Hill High School was located in the downtown business area four blocks from the river and was operating in seven buildings. When the board of education purchased 70 acres of land for the location of this new high school, the contrast was marked. Again, it was difficult for the public to visualize the building and the developed site.

The new site was in a section in which the city did not have plans for parks. Conferences with the plan commission keyed the site into its program, making it economical for both units of government. When the building was completed and the grounds began to show signs of landscaping and sensible planning, citizens became enthusiastic about it. Within two years, hundreds of houses have been built in the section around the school. What pleases us most is the attention the new homebuilders are giving to landscaping. It demonstrates fully what a large part landscaping plays in school planning and in city development.

Along Michigan roads the lumbermen cut the pine forests; then we used snow fences and sand barriers to keep the highways clear. Today, we are replanting the trees along the highways because they not only give beauty to the highways but enable us to dispense with artificial devices. Similarly, we cleared all the trees from many of our school grounds only to create noise and distraction. Today we are planting trees on school grounds as prevention against noise and distraction and also to recapture the beauty that was lost in the destruction of the trees. We are trying to get back to nature, which affords the ideal setting for learning and living and which civilization, for profit, has denied the children of today.

Children and adults who plant trees or shrubs or who grow flowers love them most. It is surprising how an ultimate plan for school grounds that is made known to the public will encourage donors. On the composite plan of the new Saginaw high school there is an entire layout of the trees and shrubbery that are to be planted over the years. Class groups, P.-T.A.'s, Hi-Y's, girl reserves, boy scouts and many others have contributed to and take pride in the development of certain sections in which they desire to have a part. Citizens of former years return to the schools and, with pride, search out the trees or hedges that they contributed or helped to plant.

It has been our experience that when the administration coordinates the educational designing, the architectural designing and the landscape designing with the city plan commission on the basis of a survey and keeps the needs before the public, the objective will be realized in a surprisingly short time.

Basic to the whole program are not the beautiful surroundings that are the result of such a plan but what the creation of these surroundings has done to direct the ideas and ideals of the future citizens who participated in making them beautiful and keeping them that way.

When the Picture's Rural

D. F. ROLL

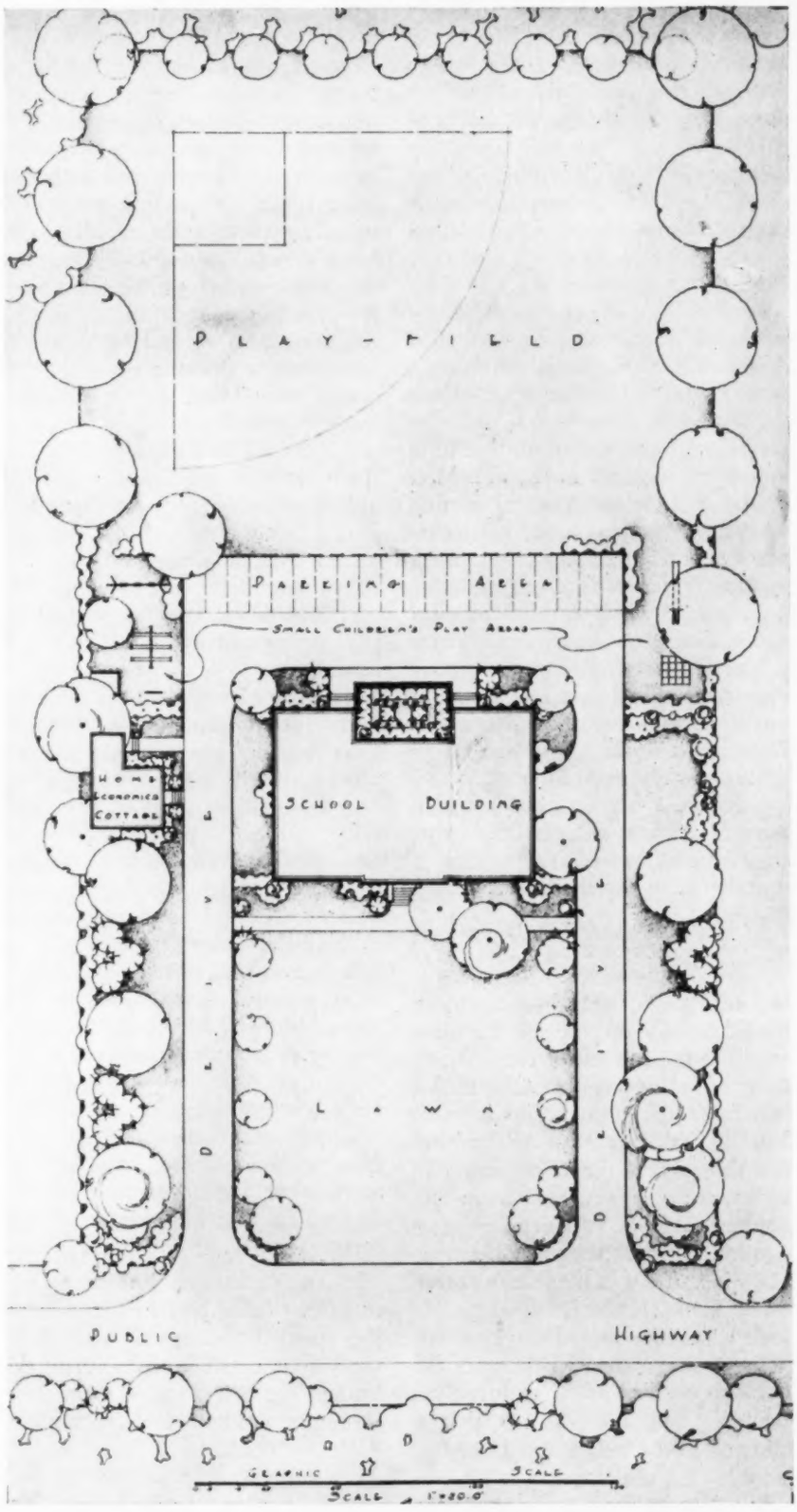
Landscape Architect, Division of School Buildings
Department of Education, Richmond, Va.

LANDSCAPING the school grounds involves more than merely planting some grass and a few shrubs. Provision must be made for paved approaches for both vehicles and pedestrians; for the development of adequate parking areas; for unloading and loading pupils off the main highway and close to a building entrance; for appropriate recreational areas for young children, adolescents and adults, including, in many cases, lighting for night recreational purposes; for amphitheaters, and for the proper location of athletic field houses, vocational shops and garages.

All of these facilities must be properly planned and logically related so that the result will be good purpose in design and a minimum cost of maintenance and upkeep.

Only those communities that believe in these aims are in a position to undertake such a program. General landscape work, recreational construction and beautification cost money. Unfortunately, this phase of school plant development seems to be thought of as something to be considered after money is provided for everything else, with the usual result that nothing is left for appropriate landscape treatment. In fact, it is doubtful in many cases whether landscaping should be undertaken unless it is thought of as an indispensable part of a community program. Doing landscape work for the sole purpose of creating a display in the community has little value unless the development program is entered into with a definite understanding that it is to serve the community.

The ideal time to improve and beautify the school grounds is during the general building program. The financial needs of the school ground improvement and beautification program should be brought up when the whole financial problem is being discussed and provision should be made for this work, as well as for the building alone. From 5 per cent to 10 per cent of the cost of the building should be allowed for complete development of the grounds, depending upon the difficulties of the site,



General plan of development, Elementary School, Burrowsville, Va.

and this amount of money should be earmarked in the beginning. It is generally thought that after a school building is completed, some magic means will be found to carry out the landscape work but this rarely works out. Landscaping existing buildings in any orthodox manner has many limitations, from the standpoints of utilizing the possibilities of the site fully and of solving the financial problem.

The choice of a site is beyond doubt the most important consideration. Preferably, it should be selected jointly by the architect, the landscape architect and the owners. Preliminary drawings or sketches should be made of several sites to determine which will be the most satisfactory. It is almost axiomatic that the cost of landscape construction will increase in direct ratio to the difficulties encountered in the site. Most of the facilities on a school ground lie in, or approach, a horizontal plane or a series of horizontal planes and land that most nearly approaches a horizontal plane will be the most economical upon which to construct.

The site selected must have good drainage and should eliminate as much heavy excavation as possible. Destruction of the top soil condition through heavy excavation and grading leaves a barren condition that must be resoiled or treated to create a growing soil, which is an expensive, time-consuming procedure.

Plans Prepared in Units

After the site has been selected, the architect and landscape architect should jointly prepare all the plans required for the entire construction program, assuming that all building and landscape construction is to be handled concurrently. Experience has shown that the construction of walks, curbs, drives, excavation and grading can be done more economically when the building program is under way than at any other time. Plans should be developed in such a manner that unit price bids can be requested. This permits the work to proceed as far as funds are available and allows it to be terminated at the completion of one or more useful units.

In planning school grounds the landscape architect is concerned with the following items: (1) excavation and general grading, which establish the base for all above-surface improvement; (2) drainage, both surface and subsurface; (3) circulation system of drives, provision for loading and unloading of pupils, parking areas, courts and walks; (4) recreational features, including a graded play field for games requiring a turf surface, especially constructed areas for games requiring special areas for play and sufficient lawn space for general usage; (5) school garden and outside study areas, and (6) any special areas that the requirements of the individual school may demand.

The division of the land should be somewhat as follows:

1. The building should be set far enough back so that a good view of it is obtained from the highway. The space between the highway and the building should then be developed into a highly refined, well-proportioned lawn area, with all usage directed toward the sides and rear.

2. The drive should serve its purpose in the most efficient, direct and unobtrusive manner possible. A U-shaped drive in front of the building is not recommended except when strict formality can be obtained. Such a drive placed between the highway and the building must be two lanes wide and is, in most cases, out of scale with anything else in the picture. Its very boldness detracts from rather than improves the appearance of the finished development.

It is better to provide a two-lane drive entering the property at one end or at the back of the building, ending in a turning motive at a corridor door with the turning motive ending in a parking area. This eliminates general use of the door in front of the building, which tends to preserve the appearance of this area. This type of drive is shorter, costs less to build and looks neater.

3. The recreational features should be placed behind or to the sides of the school building and should be properly oriented so that they fit the land in the best possible manner to eliminate grading and excavation. All play should be directed toward the sides and rear of the lot and should be served from the end corridor or the rear doors, preferably those opposite the drive, to eliminate the necessity for crossing the drive to reach the recreational areas.

The division of the land is aimed at directing as much of the use as possible to the sides and rear of the building and leaving that portion between the building and the highway to be developed into a refined, beautified setting.

After all construction work is finished, the last step in the program should consist of the preparation and seeding of lawn areas and the planting of trees and shrubs. It is unwise to attempt to plant an entire school site intensively. The best policy is to plan for all recreational and specialized use of the school grounds toward the rear and sides of the building, leaving only the front, which must be the principal beautified area of the site.

Less Planting at Back of School

It is unwise to do much planting at the rear of school property where a variety of activities is constantly going on. It is better to direct beautification toward a small area where it can be properly handled and will be much more appreciated by all. A reasonable amount of foundation planting should be placed around the building to soften the meeting of the vertical and horizontal planes. Sufficient enframement material should be used adjacent to the building to create a good picture when viewed from the highway and enough plant material should be used to define the various areas in the beautified portion of the development clearly. Shade trees should be planted to create grove effects where they are needed. If possible, they should also be used at the rear of the building in the play areas for shade but they should be out of the way of any activities.

It should be understood in the beginning that the landscaping must be continuously maintained and that a certain amount must be allowed for in the annual budget for maintenance. Sufficient funds should be set up to make the necessary repairs to the constructed elements entering upon the school ground.

Maintenance of plant material should be placed in the hands of a competent nurseryman.

Transiency—A Major Problem

New Educational Yardstick Needed

MARGARET J. SYNNBERG
Administrative Aid and Teacher, McKinley High School, Chicago

THERE is a growing tendency in educational circles to minimize local school problems that are distinctly unglamorous or upsetting to civic complacency. Correspondingly, there is increasing inclination to identify the disagreeable problems with the local administrators who must wrestle with them.

One frequently hears the condescending remark of some fortunately situated principal concerning a colleague struggling valiantly in some difficult post; "It is regrettable that Mr. So-and-So is not more successful." After three years of association with his vexing problems, they have somehow become bound up with Mr. So-and-So's mediocre ability. Given five years in the same spot, he is spoken of professionally in the past tense.

The ideal school is, of course, nonexistent. Every institution, big and little, has its own peculiar difficulties. There are some problems that might be called extrinsic, that is, they can be solved or manipulated in some way without changing the individual characteristics that make every school essentially different from its neighbor. In most school plants a capable executive can easily effect the purchase of books, the installation of new plumbing, the whitewashing of walls, the planting of shrubbery or any one of many superficial improvements that mark the enterprising principal.

Other difficulties are intrinsic in a particular school, intrinsic in the sense that whatever is characteristic of a neighborhood will be inherent in the school in which its children gather. What administrator can make spectacular progress against poverty, soot-laden air, traffic noises, factory din or an unfortunate mixture of antagonistic racial stocks in the student body?

It is the intrinsic handicaps that eventually exhaust the average administrator. After all, no one is bothering to distinguish between a principal's extrinsic and intrinsic problems. By the time the name of a man or woman administrator is commonly associated with his or her school their destinies have merged. A real educator will gladly accept the challenge, with the disheartening knowledge, however, that his intrinsic problems are millstones around his neck.

Today, one of the most insidious difficulties confronting conscientious principals is receiving little or no consideration. Those beset by it are so occupied with the machinery entailed in its wake—transfers, multiple records, teacher-pupil ratios, reorganization and supernumerary teachers—that they have little time left to discuss this bane of poverty-ridden districts, pupil transiency.

Administrators of schools that are faced with the problem of transiency cannot be judged by ordinary academic standards. Their achievements must be measured in terms of the service they render to the children who are handicapped by the constant migration of their families

In many school systems transiency is merely a functional word like membership, absence, promotion or enrollment. It is taken for granted that families move. The nomadic instinct is quite understandable and the May and October migrations are necessary but unimportant evils. The pupil turnover is usually insignificant and whatever adjustments are required are routine matters.

The present economic situation, however, has wrought havoc with the more traditional types of transiency, especially in larger cities. At any season of the year, on any day of the week, on a few hours' notice whole families pack up and leave for more promising locations and, almost as suddenly, there appears from parts unknown a new family to occupy the vacated dwelling. In most cases transient children require a maximum of personal attention wherever they enroll: special tests, remedial work and frequently shoes, clothes, glasses or dental care. Then, no sooner are the new pupils really adjusted to their groups than there is another move to better or worse living quarters, and in due time there is a new group of strange youngsters to be enrolled.

Because of fairly constant average memberships the more pernicious features of transiency are not always readily discernible. The manager of a garage may care little whether he parks one car for three successive nights or stores a different machine every night for three nights. The business manager of a school system might, if he lacked insight, see a comforting analogy between the operation of schools and garages. But a principal whose scholastic standards are high can gather scant consolation from the balancing figures on a membership report.

Chicago is an ideal city in which to observe the effect on school children of family migrations. Not only is there the shifting of groups within the city itself, but there is likewise the constant influx of the small town and country optimists who think that a big city is rich in opportunity.

In one Chicago school district that is close to the bottom of the scale economically and socially and is geographically large enough to include several types of transiency, it was possible to collect certain information about pupil migration.

In the heart of this district, two and one half miles west of the Chiago Loop, is located the oldest high school in Chicago, McKinley, an institution that once served the wealth-

iest and most cultured families of the city. Through industrial invasion the residential aspect of the neighborhood all but disappeared; stately stone front mansions were converted into rooming houses or used for cheap business purposes; Italian, Greek and Negro centers sprang up to create densely populated areas. A typical poor section of a large city, the district is roughly three miles square.

McKinley High School, like every other high school in Chicago, has regular contributing elementary schools, public and parochial, whose graduates ordinarily enroll there for their high school courses. In February 1940 a special research committee within McKinley High School undertook to investigate the school histories of the entire student body of the school to determine by what devious educational routes these boys and girls had attained their present school standing.

Results of Tabulation

On the surface, the tabulated results of 2622 pupil histories seemed nearly normal:

Graduated from 19 public schools in the district	80.9%
Graduated from 15 parochial schools in the district	8.3%
Graduated from 158 schools outside the district	10.8%

A further analysis of the figures, however, revealed that only a comparatively few pupils were really products of the schools from which they were graduated:

Eight years in same public school in district	29.1%	
Transient, but graduating from public school in district		51.8%
Eight years in same parochial public school in district	3.7%	
Transient, but graduating from parochial school in district		4.6%
Eight years in same school outside of district		3.2%
Transient and graduating from school outside of district		7.6%
Totals	32.8%	67.2%

Upon examining the migrations of the 67.2 per cent of the pupils whose educational backgrounds had been tabulated semester by semester from first grade upward, it was found that these much traveled boys and girls had attended 908 different elementary schools located in 38 states, Canada, Greece, Bulgaria, Italy and Germany. The average duration of attendance in one school, based on 5611 enrollments, was six semesters or three years.

Applying the three year average to the transient graduates of schools in the McKinley High School district, it is safe to assume that less than one third of the present McKinley pupils were trained locally in the fundamental subjects, *i.e.* arithmetic, reading, spelling and language usage. In the light of this knowledge it is apparent that the high school organization has to provide numerous classes in remedial reading, that enrollments in algebra and geometry are exceptionally small owing to the pupils' inability to master these subjects, that there must be simplified units in social studies and that commercial subjects must be presented to these pupils on an extremely elementary basis.

Scholastic Efficiency Compared

It was decided to compare the scholastic achievements of the types of eighth grade graduates as differentiated by the transiency survey. Careful measurements in different subject fields indicated tendencies that are reasonably constant.

In those fields requiring practice or drill, notably in English, foreign language and commercial studies, pupils who have changed schools frequently or who have been transplanted from one type of community to another are markedly inferior to those who may be called products of the local public and parochial schools. Curiously enough, the lowest achievement in nearly all fields is made by pupils who have attended the same school, usually far distant from Chicago, for eight successive years and then moved into the city in time to enroll in high school.

A notable exception to the lower scholastic efficiency of transient pupils is in the field of science in which a slight superiority can be claimed by pupils who have attended six or more elementary schools.

An inevitable conclusion from the study of the achievement scores of different types of grammar school graduates is that transient pupils lower the medians of accomplishment of more stable groups. Teaching levels are determined by the majority of a class. Whenever a sizable number of pupils in any class is lacking in prerequisite fundamental skills the teacher is compelled to seek common ground on which to start working, regardless of level.

Another conclusion would seem to be that any school with a high unpredictable enrollment must be reconciled to fluctuating levels of achievement.

Migration Is Not Decreasing

Transiency should be recognized as a major problem of certain schools, both elementary and high. There are no grounds on which to claim that family migrations are diminishing in number. Pupils moving from school to school cannot be penalized too highly for their helplessness in the face of too many and too sudden changes. Wholesale demotion of transient pupils to acquire needed skills is professionally out of the question. Tests and measurements may diagnose individual difficulties but, unfortunately, cannot of themselves effect a cure. As individual needs for remedial work multiply, standard class norms become increasingly unattainable.

The highest skill of the superior teacher cannot furnish the answer to the transiency problem in terms of standard academic achievement or college preparatory levels. But unless there is more toleration shown for the type of teaching that must be adjusted and readjusted to meet situations that are increasingly difficult, good teachers will be compelled to salvage their professional reputations by seeking more favorable fields of labor.

Administrators also have professional reputations. Stepping-stone schools are a liability to any school administration. Any problem that is intrinsic in any institution of learning is an integral part of the entire school system. There is urgent need for a new educational yardstick that will measure administrative achievement in terms of real service to the children, even to the least of them, of this great land.

Possibilities in Printing

ANDRES GROVES
Head of Printing Department
West Technical High School, Cleveland

Pupil trimming paper in the hand cutter in the print shop at West Technical High School, Cleveland. The technical processes taught in the shop not only provide excellent occupational training but afford the pupils a promising field of interesting and useful hobbies.

THE printing department at West Technical High School, Cleveland, is organized to give the pupil a thorough understanding of the fundamental printing processes. Printing is taught in the tenth, eleventh and twelfth grades.

The first year's work is exploratory and is designed to help the pupil find his special aptitudes and abilities. This work covers the lay of the case, printer's materials, proofreading, estimating and several exercises in setting type.

In the eleventh and twelfth grades the work is organized primarily for specialization. Here the pupil is given a brief survey of the whole field of printing, after which he is taken methodically through the study of several of its chief branches. Practical experience in shop processes is given in the composing room and press room branches.

To meet objectives of successful living, the course of study has been prepared with the full cooperation and a recognition of the demands of the printing industries. It is being taught under a progressive plan of study with equipment that is still somewhat inadequate.

The printing department occupies four shops or laboratory rooms and one stockroom. These rooms are used for hand composition, press work and bindery. The total amount of floor space utilized by the department is about 2672 square feet. The rooms are well lighted and ventilated.

Two rooms, with a combined floor space of 1370 square feet, are used by the division of hand composition. The equipment includes seven type cabinets, 26 special school-type stands, three marble top and one steel top imposing stones, two proof presses, three steel galley cabinets, one mitering machine, one lead and slug cutter, a large number of steel chases and composing sticks, steel and wood furniture and an assortment of type faces.

Adjacent to each typography section are two rooms used for press work. These rooms are equipped with three 10 by 15, three 12 by 18 and one 14 by 22 Gordon presses; two paper cutters, one No. 5 Boston wire stitcher, one ink and roller steel cabinet and binding equipment.

On entering the printing department, one is immediately impressed by the systematic workmanlike order and the various teaching devices in use. Most noticeable are the automatic attendance board, assignment charts and the reference, shop practice and test boards. Next in order are the designated places for individual groups, such as foremanship, composition, imposition, layout, distribution, typography, toolroom, stock cutting, estimation, bindery, press work and ink mixing. Numerous instructional devices are scattered around the walls of the rooms, giving processes, procedures and other information.

Another device featured in the department is the "production control board." This arrangement shows at all times the position of each project in the processes of procedure. Cards representing each project are moved from one process to another until they reach their completion. This board also serves as a means of issuing assignments in the production classes.

All of the printed forms used in the operation of the school, in extra-curricular activities and in the educational departments of the board of education are produced by the pupils in the eleventh and twelfth grades. These forms consist of tickets, programs, announcements, booklets and school and classroom procedure forms. No outside work is permitted.

The printing department is well known by the quality of work produced which compares favorably with that of industry. Many devices that originated here are in daily use in schools throughout the country. Graduates of this department are successfully employed in important departments of the printing industry. Five teachers of printing in the Cleveland public schools are graduates of West Technical High School.

The opportunities for employment in the printing industry are numerous and business firms are constantly in touch with the school with requests to furnish trained workers.

Elementary School, Tupelo, Miss.

N. W. OVERSTREET
Architect, Jackson, Miss.

THOMAS H. MILAM
Superintendent of Schools

Plan of the first floor of the Elementary School at Tupelo, Miss. This floor contains classrooms for the first, second, third and fourth grade pupils. Storage space for the pupils' equipment is provided by recessed wall-robes in each room. In first and second grade rooms, work counters with pigeon-hole compartments are built in beneath the windows. All grade rooms are equipped with loud-speakers. Additional light and ventilation are afforded by the use of breeze sash in corridor partitions. Windows are architectural projected steel; concealed mechanical operators are used in the windows of the auditorium. Most of the basement area (not shown) is devoted to two large play spaces for the pupils. The remaining excavated area contains the boiler room, the music room, the kitchen and the cafeteria. A motion picture projection booth is installed in the auditorium.

CONSTRUCTION DETAILS

CONSTRUCTION: Foundations, basement, superstructure, concrete. Steel trusses over auditorium. Roof, built up on wood joists. Windows, architectural projected steel sash. Glass blocks in clerestory of foyer.

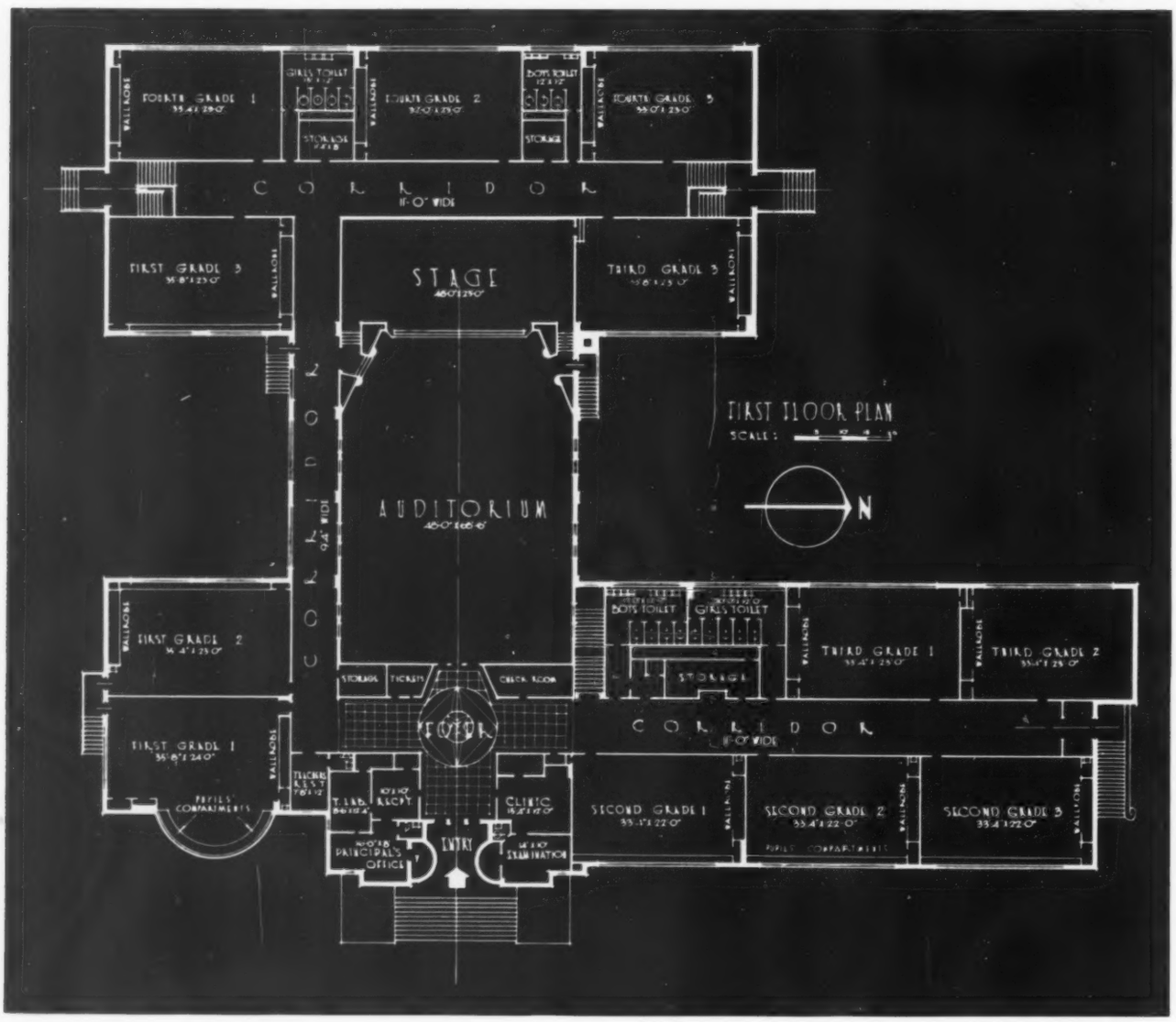
FLOORS: Basement and corridors, cement. Kitchen, cafeteria, foyer and toilets, terrazzo. Classrooms and auditorium, wood over steel bar joists.

WALLS: Corridors, vestibules, stairways, auditorium and stage, cement plaster wainscoting. Toilets, marble wainscoting.

CEILINGS: Classrooms and auditorium, acoustical fiberboard.

HEATING: Steam radiation.

COMMUNICATIONS: Loud-speaker system in all grade rooms.



P.-T.A. Organized in Reverse

WILFORD R. NELSON
Superintendent of Schools, Cass Lake, Minn.

A SUPERINTENDENT watched a movie short and got an idea. The diver in the picture began in the water, sprang upward and neatly took his place on the springboard. Not trick photography, just a simple reversing of the film.

This superintendent needed a parent-teacher association, but the organization had died eight years previously. It had been organized by a superintendent who had visions of fusing the parental group into a force for the good of the community and for a short time it drew full auditoriums of interested and enthusiastic joiners.

Gradually, the programs, which had started as carefully planned interpretations of the life within the schoolhouse, degenerated into talks by the very same people, recitals by the same children and novelty numbers by the most talented children or those with the most ambitious parents. Teachers took school time for rehearsing the stunts and extracurricular funds for stage decorations. Home economics classes served refreshments. The local leading banker, who was president of the group, was already working at his full capacity with his church and chamber of commerce activities.

Dissolution of P.-T.A.

Naturally, attendance soon fell off. Those who had no children in school quit first. There was enough social life in the community with five churches, lodges and their auxiliaries and contract bridge coming in to keep most of them in touch with the other side of this busy little town of 1500. The teachers realized the hopelessness of the situation but were long-suffering. Finally, at the second annual election the city attorney, with professional foresight, got himself elected president, and thereafter, never called another meeting.

That was eight years ago. In the meantime, the gradual progress in education made by the surrounding towns had trickled in. Orchestras and bands were featured at basketball games of other schools; why couldn't this school have them? Other towns had reinstated home economics and industrial arts since the depression; why couldn't this one?

A change in superintendents brought back the two courses. But bands are not made in a day. Orchestra practice before and after school and evenings soon prepared a small group for a public appearance. Proud parents began to praise their school.

After a few months the band made its appearance. The audience was modest in size but generous in appreciation. Business men suggested that the school band play with the town band during the summer and hired the band instructor on a year-round basis. This was excellent for keeping up band practice and pushing its popularity.

The elementary school wanted its own band and orchestra and soon shared honors at class plays and on holiday and lyceum programs. They made up in appeal for what they lacked in technic.

At this point the superintendent needed a P.-T.A.

He knew what a difference uniforms for these children would make, both on the children and on the audience. He wished he could call in a committee of a parent-teacher group to handle it. However, he realized that to try to revive that organization when the community was still not ready for it would only result in its coming to grief again.

The problem was not whether the school should or should not have a parent-teacher association but, rather, how could it be acquired.

Given a community that was not ready for the revival of the parent-teacher group and lacked leadership, but that had a group of children with unusual drive, a young, interested faculty and a real project to turn over to parents who should be giving the school their fullest cooperation, the superintendent was casting about in his mind for a way out.

At this point the diver in the movie walked backward off the springboard, poised, smiling.

"That's my answer," said the superintendent as the lights went on. "I'll reverse the ordinary procedure here. I'll get a picked group to do the work that needs to be done and when their stunt is over they can walk away, poised, praised and dry behind the ears."

"Band Parents" Organized

Next day each band and orchestra member took home a note inviting his parents to meet with the superintendent for a "band parents' club" the following Wednesday evening. The response was wonderful. Musical children come from musical parents so these parents fell in line immediately with the idea of working for the band children. They elected as president not the banker but the father of the drummer. The secretary was the mother of the slide trombone player and the treasurer, the father of the fifth grade clarinetist. No program chairman was even thought of. These parents would come together to accomplish things, not to be entertained. With such determination they were sure to succeed.

Within twelve weeks the money for uniforms for both bands was being mailed to the outfitting company and the work of putting over a band benefit dance in the Armory, with 25 cents' admission for the Christmas program (an unheard of thing, but acceptable in an emergency) was over. Door receipts for the Lyceum programs also went into the fund. The crowd that packed the auditorium the night of senior class play to see the band in uniform for the first time was evidence enough of the pride and satisfaction the entire community was feeling for the work of this band parents' club.

That was two years ago. Since then this club has been called in council several times, but it does not func-

tion without a project; it is not working without a goal. The members are on call and they are 100 per cent behind their school.

In the meantime the pupils of one 8B homeroom decided they would like to have their parents form an 8B parents' club. The teacher helped them start the movement. This lively group of parents has helped obtain a portable radio for the group, has attended its class parties and helped serve the refreshments, visited the sick and provided old games, puzzles and funny papers for a girl in the class who twice broke her leg.

The Audubon society now has a parents' auxiliary, too.

The home economics mothers went farther than just being interested; they organized their own evening classes in both sewing and cooking. For two years the home economics teacher has taught the evening sewing and the wife of the superintendent, also a home economics teacher before marriage, has run the foods classes, which start before school in the fall in order to get the benefit of the canning season.

Last winter the industrial arts department opened classes for both men and women who wanted to work with wood and wrought iron. All evening classes met on Wednesday evening, to save janitorial costs and to accommodate other community organizations.

Adult education can combine forces with child education and the school is then in its truest sense a community center. The school can expect maximum results from its work only when it is supported by intelligent parents. The real purpose, of course, was the education of parents in order that they might build a better world for their children and, consequently, build better children.

The superintendent felt that any movement or institution that proposed to help men and women find some new increment or knowledge, understanding, skill or ability through their own hard efforts is socially valuable and should be supported. He also remembered that the greatest achievement in local schools was possible only after the residents of the community had been made conscious of the part they must play in making the school.

Knowing that the ideals of the parent-teacher association were nonpolitical, nonsectarian and noncommercial, he felt that with its help it would be possible for the parents to come to realize that it is an advisory not a legislative body. Theoretically, a parent-teacher association should begin as a central group, manned by leaders of the community who are drawn into the organization by interest and training. The professional group, or faculty, should stand by to assist, not, primarily, to lead or direct.

Reversal of the approved type of organization, with the same results in mind, was found workable and necessary in this community that was not ready for the revival of its parent-teacher organization. By beginning with a group of parents that was interested in working for a definite goal, other groups began to spring up as they were needed. In this way, seemingly without direction or assistance, the parents found their proper places, where they had the greatest interest and could do the greatest good. Only those with a real purpose were attracted. Gradually, the community came to think of the school as a community center.

When this friendly and ambitious grouping has continued long enough for them to feel that they can unite and enjoy one parent-teacher organization, someone will start that ball rolling. In the meantime, slow growth is healthy growth, so long as it is steady.

Those in the profession can see the beginning of a united community that will examine the quality of the men and women who are elected to the school board and will improve the attitude they have toward public buildings and free playgrounds and the price they are willing to pay for professional leadership.

College Cottages at Low Cost

EARL MINDERMAN

Work Projects Administration, Washington, D. C.

FIFTY new stone cottages that now adorn the campus of the State Teachers College at Flagstaff, Ariz., and were occupied during the summer by teachers attending summer courses were completed at a square foot cost of $3.33. These cottages, which with appurtenant buildings have been designated as "Cottage City," replace a group of dilapidated frame structures that formerly housed the student teachers.

Built by the Work Projects Administration at a cost of $105,000, the group consists of 50 one room and two room cottages, a community study hall and another building containing a laundry and shower facilities for the students.

There are 28 two room cottages with outside dimensions of 14 by 35 feet, and 22 one room cottages, 14 by 18 feet. The study hall is 20 by 50 feet and the community house is 16 by 56 feet. Each cottage is equipped with water, sewer, gas and electrical connections and light housekeeping facilities.

The cottages were constructed in two rows along a horseshoe shaped area, 270 feet wide by 670 feet long; the space is open at one end with an inner court 140 feet wide extending the entire length of the center of the grounds.

The walls, 1 foot thick, are built of native malapai stone gathered near by and all woodwork is of native lumber; the structures have concrete footings, foundations, floors and a concrete platform at each entrance.

The roofs are of a built-up "A" truss type, covered with shiplap and composition shingles; window sash are steel; interior walls are plastered, and the 8 foot ceilings are of composition material. Each room has a floor area of 12 by 16 feet.

Before construction could be started, a group of frame cottages had to be demolished and extensive excavating, grading and leveling of the grounds completed. Fifty per cent of the excavating was in solid rock, which included trenching for 7254 linear feet of water and sewer lines, as well as for the foundations and footings for the buildings. Roadways were graded and gravel surfaced; the grounds were landscaped with trees and shrubs, and 3000 linear feet of concrete sidewalks, 4 feet wide, were laid.

Preventing Maladjustments in Junior High School Pupils

WALTER A. WITTICH

Director of Research and Guidance, Milwaukee Country Day School, Milwaukee

AT LEAST two causes for pupil maladjustment, *i.e.* the physical and the academic, lie within the immediate responsibility of the junior high school. Too frequently, members of an incoming seventh grade group are enrolled, assigned to classes and from then on are allowed, like water, to seek their own level. In this case it is adjustment within the academic compartments that confronts them.

In contrast to this common practice let us stop to analyze some of the basic philosophies that actually led to the creation of the junior high school as an educational unit. Among them are the following:

1. To lead the pupil, gradually and successfully, from elementary to high school responsibilities.
2. To provide social and educational guidance during the adolescent age when the pupil is most in need of it.
3. To plan a curriculum that will allow pupils to broaden their horizons in anticipation of being more educationally mature when asked to elect later high school subjects.
4. To provide adolescent pupils with pupil-centered teaching technics.

No Place for Maladjustment

Obviously, those who formulated the junior high school philosophy wished to provide a school in which pupil maladjustment has no place.

In order to fulfill these goals it is increasingly necessary for the school to know well every child who enters its doors. We assume the responsibility of providing the physical and academic environment that is best suited to the needs of each individual. Thus, the modern school must evaluate an incoming pupil from the standpoints of physical status, academic achievement and tool skill ability before attempting to continue his formal educational plan.

Is it practical to attempt this? Is it possible? Today the answer is, yes!

Perhaps the first question to be asked is: Is the incoming pupil at a physical level that will allow him to react successfully to his new school environment? Second, is the incoming pupil's command of the tool skills, *i.e.* reading, English usage and writing, at a level that will allow him to meet his junior high school academic responsibilities successfully? If this information is available for every incoming pupil a great deal of future maladjustment can be avoided. Naturally, later academic situations will arise that will threaten adjustment but these are less easily anticipated than are those just mentioned.

Checking Pupils' Status

Today it is within the power of the average school to learn quite easily and inexpensively the physical and tool skill equipment status of its incoming pupils. How one school acquires this information is herein explained.

Shortly before the opening day of school all entering pupils are asked to meet for the purpose of taking objective accomplishment tests in English usage, handwriting and reading. Usually, this can be easily accomplished in the course of a Saturday morning. Wise choice of objective scales and tests reduces scoring to a minimum. Manuals of the better recommended tests are so complete that a short period of study will allow a conscientious and well-trained teacher or administrator to interpret the results of the tests. Pupils who fall below a norm based on previous experience with the test scores represent a group that is almost certain to encounter difficulty (scholastic failure) if allowed to enroll in the autumn with the incoming class at large.

These pupils will probably fail if for no other reason than that they will be so handicapped by their low tool skill abilities that the process of getting and interpreting new information will take almost all of their time and leave little or no time for using this knowledge in fulfilling even the most basic requirements of their academic responsibilities.

The first responsibility of the school to such a group is clear: Provide remediation in reading, writing and usage until a minimum level is reached that will allow the pupil a reasonable chance for success. Only after this handicapped pupil has "sharpened" his tools should he be allowed to assume his place in the normal line of school responsibility. Obviously, it is better to anticipate difficulty than it is to allow difficulty to occur and then try to remove the causes after additional maladjustment symptoms, lack of interest in school, discouragement and feeling of futility arise to complicate the picture.

Remedial Work Justified

In practice, it usually happens that remedial groups complete their work before the Christmas vacation. In many cases the program of the pupil must be reduced to as little as one half the traditional load. The outcome, satisfactory adjustment, is more than justification for the temporary curtailment.

Yes, it does burden the staff during the period in which remediation is attempted, but, fortunately, the school year is much less crowded with activity in the fall than it is at any other season and, since the need for remediation is so clearly a prerequisite to later adjustment, the staff will willingly accept the challenge.

The determination of physiologic status of pupils represents a problem of slightly more administrative difficulty and could not have been accomplished twenty years ago. Technical advances in the field of testing vision and hearing, for example, have made great progress. Certain reliable screening or basic survey

tests of the whole school population are now available in the measurement of both hearing and visual efficiency. From the results of these tests the identities of pupils who are in need of further professional medical examination can be ascertained. The Betts test for visual acuity, the Sonotone audio test and other reliable tests have made it possible to examine large groups for hearing and vision in a short time and at remarkably small per pupil cost. Thus, the traditional cursory medical examination can be made more valuable through testing for hearing and vision, both so vital to successful academic accomplishment and adjustment.

The old practice of waiting for scholastic failure or other maladjustment manifestations to reveal themselves in boys and girls who shrink from the admission that they hear only 50 per cent of the teacher's vocalizations, see only a fraction of the blackboard demonstrations or read only under the handicap of eyestrain, blur or headache, is fast disappearing. Modern procedure is characterized by scientific and periodic hearing and vision examinations of every school child and tests of reading ability, skill in manipulating the tools skills and facility in use of basic English usage.

The truly pupil-centered school will certainly accept the responsibility of knowing its pupils before attempting to teach them. It will accept the responsibility of knowing their needs and present status of ability and will make proper provision for remediation when it is found to be necessary. Only then will it ask that the pupil accept the challenge of a normal level of scholastic responsibility, since it realizes that inopportune acceptance of that responsibility may jeopardize the successful adjustment of the pupil.

Teacher, How's Your Voice?

W. C. BRYANT
Teacher, Junior High School, Kansas City, Kan.

TEACHERS' nerves are constantly bombarded in the classroom and, as a result, most of them have too many high notes in their voices. I cannot understand why teachers' colleges have not been more effective in voice training inasmuch as teaching ability depends largely upon its quality. Even if the training school fails, teachers need not neglect themselves.

The typical excuse for not having a better voice is: "I have been too busy to give any serious thought to my own voice." Children in the classroom are sensitive to the voices of their teachers and, unfortunately, there are only a few teachers in every school system who have fine voices and who use them intelligently.

Teachers who know they have poor voices and feel that they can do nothing about it are wrong. Anyone who really wants a pleasing, effective voice is certainly able to cultivate one with a little training and effort. When Mrs. Roosevelt was told by members of her radio audience that they did not like her high-pitched voice, she immediately set about changing that voice to make it more pleasing to her listeners. She succeeded.

If you are in doubt about your voice, I challenge you to make this simple experiment. Take a position for a few moments just outside an open classroom door when the teacher in charge is talking and does not know you are listening. I am quite sure you are capable of analyzing properly what you hear in terms of the 10 points suggested in the accompanying box.

1. Is my voice pleasing to hear?
2. Is my voice pitched too high?
3. Is my voice too loud?
4. Is my voice low and uninteresting?
5. Is my voice full of force?
6. Is my voice always the same?
7. Is my voice commanding?
8. Do I keep training my voice?
9. Am I conscious of the effect of my voice upon other people?
10. Do people tire of my voice?

Then ask a fellow teacher to take up a listening post just outside your classroom door within a day or two. Leave your door open for the two or three days you are expecting the listening post to be occupied. During the time you are expecting the eavesdropper you will see that your voice is used as properly as you know how. Please do not forget to observe the whole effect of your voice upon your pupils.

When your listener reports the results of this experiment, do not make the mistake of refuting even the smallest of his criticisms. You are searching for the truth, not defending the poor quality of your voice.

You will find, however, that the best advice that can be given about your voice is to develop the habit of patience and persistence. A wonderful voice cannot be developed overnight. If you achieve any noticeable improvement within six months of intensive training, you may consider yourself successful. You will find that a great portion of this time will be spent in keeping yourself out of the old rut you have been in rather than in developing any new habits. Do most of your practice on low soft notes. You will enjoy watching the effect of your newly acquired voice upon the attitudes, interests and emotions of your pupils.

Be sure to develop your voice to supplement your personality. It is disturbing to meet a person whose voice and personality clash rather than complement each other. A pleasing voice is one of the enjoyable things of life that anyone can have just for the effort. Let your voice speak for you and create an entity that is distinctly you. Let your body so act as to furnish a stage setting for the drama your voice is presenting.

Religious Prejudice—

A Hazard to Beginning Teachers

SAM H. HALE and GERTRUDE BARNES

Superintendent of Schools, Newcastle, Wyo., and Teacher, Erie High School, Erie, Colo.

REGARDLESS of our professed open-mindedness and lack of discrimination between races and creeds in our American school systems, the religious angle may become a serious handicap to a beginning teacher. It is a phase of the profession that has been and can be easily handled, but many have faltered at this hurdle because they have never before been faced with such situations. Religion is a dormant challenge to any school teacher.

While no particular sect is responsible for this feeling, nevertheless, religion may be compared to a sleeping dog which, when accidentally prodded, responds with sufficient alacrity to arouse the entire pack. The possibilities for unpleasantness arising from religion are numerous in any school system.

Few novices within the profession will believe that they may meet situations provoked by religion in which they will take issues. Yet, within every individual who has been subjected to childhood religious training —and this includes the great majority of teachers—there are certain conditioned responses to particular situations that will manifest themselves occasionally. These convictions may not be in full harmony with the philosophy of the school and administration policies with the result that trouble arises to a greater or lesser degree.

Pupils Resent Favoritism

Early training has established certain beliefs that may hamper the cooperation that is expected from the teacher. Often the practice of favoring particular pupils may be traced back to a similarity in religious affiliations. If there is any foundation for this, the feeling on the part of the other pupils in the classroom will often equal the bitterest adult bigotry. Townspeople and fellow teachers are alert to such situations, too.

Many beginning teachers have had part of their educational training in parochial or church-administered schools. Since the viewpoints of the denominational school and the public school differ widely and on many points, it is necessary to make many adjustments.

Because of former unhappy experiences, many superintendents will make careful inquiries into the religious beliefs of applicants. Certain groups of teachers have been known to employ unethical and unprofessional tactics in order to hold their positions by capitalizing upon their affiliations with townspeople of the same religion. This, of course, can place a stigma on other applicants of the same denomination.

Little Value in Argument

There have been innumerable instances of teachers taking definite stands in communities where partisan issues along religious lines are acute. Such procedure is unwise for any teacher. While he is, of course, a citizen of the community, with unalienable right of free speech and expression, he must realize that his position can exert a better influence in all directions if he maintains an even keel, tolerant open-mindedness and judgment held in reserve. There is little value in argument; the usual result is bitterness. The open wound is not healed by bringing forth issues unnecessarily or lining up on sides.

Few communities will offer objections to the teacher's religion provided he adopts an inconspicuous, nonaggressive attitude toward his work, his pupils and the community. He must realize that teaching and religion are two distinct elements that are materially separated from each other in the American democratic school system. The beginner must assume teaching responsibilities and maintain a degree of poise and grace in his position that will not provoke criticism.

Bitter school board elections have resulted time after time because a teacher believes he is being let out of a system because of his religion. If this is true, it is usually his own fault for making an aggressive issue of an item he should have been diplomatic enough to side-step.

This is, perhaps, a typical story, but it illustrates the point. Miss W——, a primary teacher, had not been offered a teaching contract for the ensuing year. She had been criticized solely on the basis of inadequate teaching, and complaints about her work had been too numerous and well founded to ignore. Religion had not been considered.

It happened that Miss W——, however, went to the pastor of her church, complaining that she was being discriminated against because of her church affiliation. The members of her church retaliated by voting into office two school board members for the express purpose of rehiring this teacher.

Miss W's Rude Awakening

The superintendent, in the meantime, was ready to recommend to the board another candidate whose credentials, training and personality were far above average. The board, however, reelected Miss W——, shifting her from the second grade to the seventh, to the extreme dissatisfaction of many parents. Miss W—— made no attempt to cooperate with the superintendent or principal because she felt secure with her influential friends to guarantee her position. Her awakening came the following spring when these same friends, having seen the evidence of her work, turned down her contract.

Because he is a stranger to the community, the beginning teacher should not involve himself with any one group. He should refrain from joining the ranks of an active partisan group. His friends should be chosen from both factions. Never should he seek sympathy or support from either group on the grounds of his religious affiliations.

More 1941 School Legislation

M. M. CHAMBERS
Specialist in School Law

PREVIOUS articles in this series have dealt successively with new legislation on school finance, on matters affecting pupils directly and on laws touching teachers. It will be recalled that half a dozen states joined in the march toward the enactment of "continuing contract laws" for teachers, whereby the contract is automatically renewed from year to year unless the board of education notifies the teacher to the contrary by a specified date, usually before the end of the school year.

It is now possible to report that Ohio has enacted a statute creating an entirely new kind of "continuing contract" that gives the teacher a status equivalent to that of permanent teachers under full-fledged teachers' tenure laws in other states.

Ohio's "Continuing Contract"

The new Ohio act is a teachers' tenure law in which the status of a permanent teacher is uniformly referred to by the misleading phrase "on continuing contract." It provides that a teacher who has taught three years in a district (or two years, after having held a continuing contract in some other district) becomes eligible for employment on a continuing contract if recommended by the superintendent. However, the school board may reject the recommendation by a three fourths vote of its full membership. Thereafter, the same board may employ such a teacher under an ordinary contract for not to exceed two years, whereupon any further employment of that teacher must be under a continuing contract.

The most signficant provision stipulates that on or before September 1, 1941, each board of education shall enter into a continuing contract with every teacher who, at the time of the passage of the act, was completing five or more consecutive years of employment by the same board, and who holds a professional or permanent certificate. Under this statute, service under what is designated as a continuing contract is virtually equivalent to service as a permanent teacher in states that have full-fledged tenure laws, because what the Ohio legislature calls a "continuing contract" is to remain in force until the teacher resigns, retires or is removed for specified causes after notice and hearing.

Teachers may be suspended on account of decreased enrollment in schools but only upon recommendation of the superintendent, who must give preference to those on continuing contracts and to those who have served the longest. Teachers thus suspended are entitled to be restored to service in the order of seniority if and when vacancies for which they are qualified subsequently occur. Teachers on ordinary contracts must be notified on or before March 31 of the intention of the school board to terminate their services or they will be deemed to be automatically reemployed for the succeeding year. This is the type of provision that is called a "continuing contract law" in other states.

School districts having fewer than 800 pupils are exempted from all of these provisions but are required, upon making a second contract with any properly qualified teacher, to make it for not less than three years or more than five years. All subsequent contracts with the same teacher must be for periods of five years. In these districts the first contract with any teacher may be for from one to five years, depending upon the previous experience of the teacher.

In Idaho a bill requiring that courses in safety, including traffic rules and regulations, be taught in all schools and educational institutions of the state was introduced but not passed. It would have provided for graded safety textbooks and directed the state board of education to revoke the certificate of any teacher who refused or neglected to teach the safety course.

West Virginia authorized county boards of education to employ a county director of instrumental music on a twelve months' basis. This commonwealth has for several years authorized county boards of education to furnish free textbooks to pupils whose parents are unable to buy them. The 1941 legislature took another step toward free textbooks for all by permitting the county boards to use any surplus funds in their free textbook accounts to provide free textbooks for all pupils in grades 1 to 8, with the stipulation that grade 1 shall come first in order of preference. The statute also establishes an order of preference of subjects within grades, in which reading ranks first.

Apparently, all that will be necessary to provide free textbooks for all elementary school pupils is an appropriate increase in the state allotment of free textbook money to the counties.

Textbook Commission Abolished

Arkansas abolished the state textbook commission and gave the state board of education general power over the regulation and distribution of textbooks. The state is to supply the districts with free textbooks so far as the available funds permit. The selection of particular books is to be delegated to committees composed of five teachers for each elementary school subject who are to be appointed by the state commissioner of education.

The decisions of the textbook committees will be subject to review by the state board of education. In districts that maintain accredited high schools, the selection of textbooks is to be similarly made by locally appointed committees of teachers. Teachers serving on the elementary selection committees must be college graduates with at least two years of teaching experience.

Montana abolished the state textbook commission. At present, all textbooks for all subjects in the elementary grades are contracted for until the school year beginning July 1, 1943. Thereafter, approximately one third of the books will be selected and purchased in 1943, 1945 and 1947, respectively. Presumably, some new plan for executing these functions will be put into operation by 1943.

Basketball boundaries in the gymnasium at Peru High (Indiana) are clearly outlined by using both light and dark finished Hard Maple: Henry C. Wolf, Logansport, Ind., is the architect.

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SAYS HENRY C. WOLF, ARCHITECT

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REG. U. S. PAT. OFF

(NORTHERN HARD)

Utah created a state course of study committee, composed of the state superintendent of public instruction, the dean of the school of education at the University of Utah and five school superintendents to be appointed by the state board of education. The committee is to recommend textbooks and changes in courses of study. A companion act provides that hereafter the state textbook commission shall consist of the same members as the state course of study committee.

Steps toward improving the structure and services of the organization for public education at the state level are in prospect in several states.

North Carolina enacted a measure submitting to the people a proposed constitutional amendment under which a single state board of education would be given unified control of public education, taking the place of the several different state boards and agencies that now have a hand in the administration of the public school system.

Oregon merged the present state board of education and the state board for vocational education. The new state board of education will consist of the governor, the secretary of state, the superintendent of public instruction and four additional members appointed by the governor. Present members of the state board for vocational education will serve out their unexpired terms.

In the same act by which a new state trade school was created at Milford, Nebraska reconstituted the state board for vocational education. The reconstituted board consists of one member of the state board of control of state institutions, to be designated by the governor, the dean of the college of agriculture of the University of Nebraska, the state superintendent of public instruction and two other persons to be appointed by the governor for terms of three years each.

Washington has directed the state superintendent of public instruction to provide sight-saving equipment for the use of public school pupils having defective vision, and to lend such equipment to public schools where the number of such children does not warrant the establishment of sight-saving classes. The loan of equipment shall be made upon the recommendation of an ophthalmologist that it is necessary to enable a child to enjoy educational opportunities equal to those of children with normal vision.

Montana provided that a visual education library shall be set up in the office of the superintendent of public instruction and authorized the state superintendent to employ a supervisor and any clerical help that is necessary.

Montana also created the position of director of physical education in the office of the superintendent of public instruction, but failed to provide any appropriation to finance the work during the current biennium.

The legislature of Iowa authorized the governor to appoint a commission of citizens to cooperate with the superintendent of public instruction in making a survey to discover needed changes in the organization, support and government of the public schools of the state, and to prepare a complete revision of the laws relating to education. The report is to go to the governor and is directed to be printed and placed in the hands of the legislature in 1943.

Ohio created a state school survey commission composed of four senators, four representatives and three other persons to be appointed by the governor to study the school laws with a view toward recodification and revision to improve the organization and finances of the state school system. It must report in January 1943. The legislature appropriated for the commission's use $7500 for 1941 and $15,000 for 1942.

Although the Minnesota legislature rejected practically all of the numerous recommendations of its Interim Committee on Education which was set up in 1939, nevertheless, it continued the existence of the committee for another two years, with the addition of two members to be appointed by the senate and the house, respectively, and appropriated $7000 for its use.

School for Soldiers

SO MANY of the men in training at Camp Stewart, Ga., had had little or no schooling that it created a problem for the morale officer, Major William O. Smith, which lead to the establishment of the National Defense Training School. Today, some 400 white soldiers and 35 Negro soldiers are learning the three "R's" in the curriculum set up and directed by P. E. Babcock, director of vocational education for defense workers, in conjunction with the Liberty County board of education and H. A. Bacon, superintendent of Liberty County schools. A. G. Overman, superintendent, Hinesville High School, Hinesville, Ga., is in direct charge.

Approximately 100 men were discovered who could not even read or write, and some 300 more had never gone to school beyond the third grade. The small number of Negro soldiers enrolled in the class is due to the fact that there is but one Negro battalion in camp.

Classes of not more than 25 men to a teacher are held on Monday, Tuesday, Thursday and Friday nights from 7 to 9 p.m. in the Hinesville High School and the men are required to attend all four nights. A ten minute intermission is provided between the hours. The soldiers are transported in Army trucks to and from the camp.

Sixteen white teachers and one Negro teacher are employed, the white teachers being members of the school faculty. They are told to concentrate first on the job of teaching the men to read and write. The laboratory method is used because individual instruction is necessary; work books in arithmetic and English and a speller for the lower grades are employed.

"Nearly all the men in the classes are greatly interested in taking advantage of these courses," Mr. Overman asserted. "Many have expressed the desire to be able to sign the pay roll and not have to make an 'X' again. We have noticed rapid improvement in their writing and arithmetic."

Two weeks after this school for backward students was organized, courses in shorthand and typing were offered to the men of high school level. Approximately 280 men are enrolled; these classes meet in two groups, one on Monday and Thursday and the other on Tuesday and Friday.

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Principal Smith's Rotating Schedule

EARL HUTCHINSON
Principal, Brewer, Me.

THE bell rang; the class period was ended. Principal Smith frowned. He was teaching a class of seniors, for he liked to be in close touch with actual teaching and he was in the middle of a fine discourse upon the fluctuating values of money. His forty minute period was too short; in fact, it seemed as if the period had just begun so little had been accomplished.

As he visited other teachers during the week he observed that they, too, had scarcely got under way with the day's assignment when the bell rang. Then pupils went to another similar experience. After several days of watching this performance Principal Smith began to seek remedies.

He counted the minutes in the school day and tried to arrange a schedule with longer periods. Local conditions, such as trolley service, school buses and customary noon hour, made it impossible to vary the time schedule of the day to any appreciable degree.

Limitations of Short Periods

As he read a monograph upon the correct classroom procedures, he became more aware of the limitations of the forty minute period. Modern books on methods asserted that every class could be a laboratory affair. The teacher should begin the period with a rapid-fire drill of ten minutes and then swing into the assignment. On this phase, there should be questions, discussions, reports and debates, culminating in a brief test. Then came the logical time to develop out of the known material the assignment of the new, with good motivation prepared. There should follow about twenty minutes of directed study, wherein the teacher could make sure that all pupils knew how to begin the new work, care for individual problems and truly get all pupils on the correct road to the lesson and eager to complete it.

However, such a feat was impossible within the time limits he and his teachers worked. Principal Smith spent several hours attempting to work out a schedule that would have classes meet four one hour periods per week instead of five forty minute ones daily. But he got so tangled with his special courses, such as physical education, home economics, agriculture and chemistry laboratory, that he had to give it up as an impossible job.

His restless soul was still not satisfied and he scanned his educational periodicals each month, hoping to find an answer to his problem. Then, one month, he ran across an article by a principal of a small school, explaining how that school managed to give a longer teaching period and yet not eliminate any of its subjects offered.

It was simple: Merely take two periods instead of one for a subject and continue day after day in a similar fashion. This Principal Smith grasped eagerly. Having found the key to the solution, he soon found more printed material on the so-called rotating schedule. The arguments were entirely in its favor.

Principal Smith proceeded to enjoy himself. He worked out time schedules and played with various combinations until he found one that seemed to fit his school. For the remainder of that school year, he adopted an 8/5 schedule. Since his schedule was planned to incorporate eight periods, he could not change that situation during the year, but he could arrange his time schedule so as to have only five periods per day. So instead of eight forty minute periods, he now had five sixty-four minute periods daily.

Having mastered the principles of the idea and adjusted them to his school, he called his faculty together for explanation and instruction. He first outlined the period procedures. On the blackboard he showed this:

Mon.	*Tues.*	*Wed.*	*Thurs.*	*Fri.*	*Mon.*
1	6	3	8	5	2
2	7	4	1	6	3
3	8	5	2	7	4
4	1	6	3	8	5
5	2	7	4	1	6

Periods merely followed each other. Barring holidays and days off for other reasons, the schedule began over again every eight days. He then enumerated the advantages. They were, briefly: (1) fewer daily assignments for pupils and teachers; (2) a long period, to promote better instruction; (3) variety to the school schedule; (4) individualized instruction; (5) directed study.

Principal Smith emphasized the fact that there was no extra time given teachers for instruction; time was merely allocated differently. Now, teachers could do a real job of teaching. They could plan a period by the clock to include drill on the previous work; discussion on the assignment; motivation through plays, debates, reports, laboratory stunts; testing, drill and retesting; a thorough presentation of the assignment, and directed study on the new work.

Some Grumblings at First

As he visited classes Principal Smith found he had a major task in educating his teachers to the proper use of this long period. Several were prone to employ all of it in questions and answers. One felt that directed study meant to assign the pages to be covered by the pupils and leave them to their own devices while she corrected papers. Another wasted time through old-fashioned stalling and irrelevant materials. But, bit by bit, through Principal Smith's constant supervision, his teachers grew in their skill and technic in handling the period.

One weakness lay in the lack of repetition, for a class met only five times in eight days. When the period missed came on a Friday, it meant three days of no study in that subject, and longer review time was needed to restore pupils to where they were during the previous class.

Through the following summer, Principal Smith worked out his ideal schedule. When fall arrived he put it into effect and it worked like a charm. He had an activity period first daily and then for the rest of the day, four 70 minute periods on a 5/4 basis. Each class met four times a week, giving a subject 280 minutes in class.

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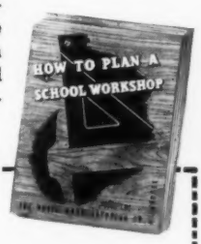

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ADVERTISING PAGES REMOVED

Cafeteria at Hillman High

EDNA GILBERT
Cafeteria Director, James Hillman Junior High School, Youngstown, Ohio

THE cafeteria of the James Hillman Junior High School, Youngstown, Ohio, was planned so that it could be expanded as the need arose. The school, which is described elsewhere in this issue, was designed to accommodate 1500 pupils. Approximately 300 or 400 can now be served in the cafeteria with the adoption of two lunch periods.

The cafeteria section comprises a dining room, a kitchen with adjoining storage room, an employes' restroom and the manager's office. Pupils pass to the service counter, which is located on the kitchen side of the dividing wall, from a main hall and then follow along the counter into the dining room.

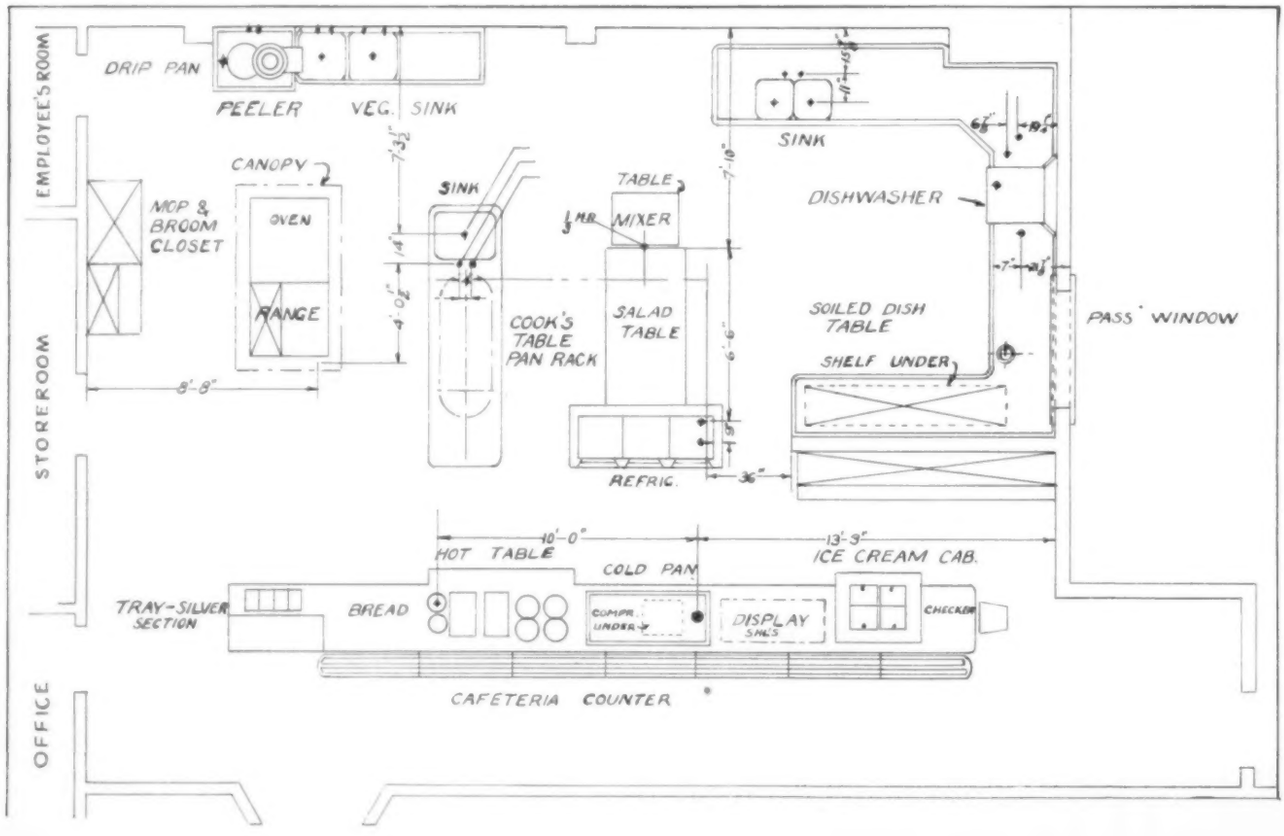
The dining room is furnished with wooden topped tables that have metal frames. Chairs are metal with wooden seats and backs and are provided with a rack for books under the seat. The color scheme selected is a combination of dark and light green, with an ivory composition counter front and stainless steel trim. The walls are paneled 5 feet high with glazed tile and the floor is terrazzo.

The equipment in the kitchen is compactly arranged and has some extremely desirable features. There is, for example, a convenient all-metal service counter, 28 feet long, that is divided into five units: tray and silver section combined, hot table section, bread section, cold pan for salads and milk and dessert section.

The cafeteria at James Hillman Junior High School, Youngstown, was planned so that it can be expanded as the need arises. The arrangement of the equipment is compact and convenient. Kling and Canfield were the architects.

The top of the counter is of 16 gauge, 18-8 stainless steel. It has a framework of 1½ inch all-welded angle iron, fitted with an 18 gauge galvanized iron bottom and center shelf set into angle iron frame supports.

At the beginning of the counter the tray section measures 42 by 18 by 36 inches. The tray step is 18 inches wide and the top supports a 12 inch silver box that is even with the top of the counter. The silver box is made throughout of polished stainless steel and has four compartments. These compartments have rounded bottoms and are securely soldered and contained in the stain-



less steel frame. The bread section is a plain section of the counter adjoining the silver and tray section.

Two 12 by 20 inch openings in the top for meat and six 9 inch round openings to hold soup and vegetable receptacles comprise the hot table.

This hot table is equipped with electrically heated receptacles that are well insulated and provided with control switches. A work shelf of stainless steel has a 10 inch undershelf mounted so that it slants toward the table. Reserve dishes for serving are stacked on this undershelf.

The cold pan used for both salads and milk is 60 by 24 inches and is 2 inches deep. It is fitted with a display refrigerator plate and is well insulated.

Display Space Added

A double deck plate glass shelf, 48 by 18 inches, adds extra display space to the dessert section. These shelves are made of ¼ inch plate glass, the first set 15 inches above the counter and the second 8 inches above the first. At this point a four hole, double row, self-contained ice cream cabinet, with a ¼ h.p. motor, is set into an opening provided in the body of the counter. The checker's station at the end of the counter has a 24 by 30 inch polished stainless steel top. A foot rest and a metal drawer with polished steel front and chrome plated handle are also provided.

At the front of the counter is a triple bar tray sliding rail composed of three lines of stainless steel clad tubing, 1 inch in diameter, mounted with flush joints on chrome plated brackets. The rail is located 1¼ inches below the level of the counter top and the brackets are bolted to the front of the counter at the location of the upright pilasters that divide the panels.

The drawing shows the plan of the kitchen and the arrangement of the equipment. The cook's equipment consists of an all hot top heavy duty gas range in one section and an electric oven; these are lined up facing the cook's table. At one end of this unit is a regulation cook's table, 10 by 33 by 34 inches, constructed of 14 gauge, 18-8 stainless steel; at the other end is a stainless steel sink. This sink measures 32 by 24 by 10 inches and is constructed of the same material as the table. The cook's table and sink are integral.

Refrigerator storage of 45.6 cubic foot capacity is of the institutional reach-in type, with a self-contained compressor. Located directly back of the cold pan section of the service counter, it is convenient for the storage of reserve salads and gelatin desserts. The refrigerator is also convenient to both the cook and the salad maker.

Under the windows in the kitchen are two sets of stainless steel sinks. One sink, for use in salad and vegetable preparation, is 84 by 24 by 36 inches. It consists of a two-compartment sink with one drainboard and a 10 inch (finished height) splash board extending across the entire back of sink and drainboard. At one end of the sink is a pedestal type of peeler with capacity of 15 pounds and with a ¼ h.p. motor. This peeler is located so that it empties directly into the sink.

The other sink, also built of stainless steel, is 36 by 18 by 10 inches. It has two compartments and is arranged with a top flange secured to openings in the clean dish table.

All sinks have rounded corners and are firmly welded in one piece. The drains are located directly in the center and are provided with a white metal nonclogging waste outlet. This is set into a die-stamped ½ inch recess and is equipped with a stainless steel perforated and removable strainer. A lever handle located under the bottom of the sink operates the outlet. A combination swinging faucet is mounted at the rear of each sink.

The salad table is equipped with a top of sectional maple and two galvanized iron shelves with two sliding doors on each side.

An electric mixer that can be adapted for use with 12 and 20 quart bowls, with beater and whip for each size of bowl, stands on a 24 by 30 inch table with a 3 inch sectional maple top and a galvanized base on angle legs.

The dishwashing tables and machine are built as a separate unit. A pass window, 4 feet long, formed of 22 gauge stainless steel over a window sill permits the handling of trays and dishes direct from the dining room.

The dishwashing machine, of the semiautomatic spray type, is constructed of 16 gauge stainless steel. Provision is made for maintaining the temperature of the circulating wash by means of gas.

The soiled dish table is L-shaped and has a total area of 37½ square feet. It is made of stainless steel and has a galvanized iron lower shelf. The clean dish table is also L-shaped with a total area of 40 square feet. The top of the entire dish table is constructed of 14 gauge stainless steel with a 3½ inch raise all around and a 1 inch turndown where it is connected to the dishwashing machine.

The tables, sinks and service counter have a leg base of 1½ inch standard iron pipe with adjustable bell feet that are securely fastened to the underside of the table tops with 14 gauge galvanized iron channels.

All in all, the James Hillman Junior High School cafeteria is a fine example of the latest in school lunchroom construction.

FOOD FOR THOUGHT

• How to obtain the best results in baking and points to observe to prevent failure are included in "Breads, Rolls, Waffles and Muffins for Quantity Cookery," by Alice Easton, published by the Dahls, Haviland Road, Stamford, Conn. (50 cents). This little "Gold Book" contains many basic quantity recipes.

The same helpful information applied to cakes, cookies and cake icings is also available in Gold Book No. 34. This describes the necessary ingredients and gives the important steps in the preparation of numerous recipes.

• An excellent fund of information on school lunchrooms is included in "The School Lunchroom Guide" prepared by the community education section of the Virginia State Dietetic Association for the benefit of untrained, as well as trained, managers. It contains just the kind of material that a manager or cook needs for ready reference. "Finance simplified," is one of the subjects covered, for example; also, "planning the day," "buying the food," "preparing and cooking the food," and "serving and selling." Pen and ink sketches lend variety and interest. Copies can be obtained by writing the association or Mrs. Sally Anne Kurka, nutritionist, Roanoke County Chapter, American Red Cross, Roanoke, Va.

Colleges Must Meet Demand

ALBERTA M. MacFARLANE
Educational Director, National Restaurant Association

IS YOUR college getting the money the student has to spend on food or is the business going across the street to the corner drugstore, sandwich shop or even bookstore with its up-to-date soda fountain and luncheonette? If the latter is true it is time to sit down and analyze the situation.

The college should be set up to meet student demands. When it can no longer meet these demands it is not fulfilling its obligations. Therefore, we ask: "Why should college dining rooms show an annual deficit while quick lunchrooms across the street are thriving and expanding on student trade?" Let us consider what makes one a liability and the other a going concern.

First, student attitudes must be taken into consideration. The modern student is cost-conscious and wants the most for his money in quality, quantity and service. Not all students can afford to eat three meals a day in an expensive dining room or cafeteria for these entail a large overhead that must be absorbed in the selling price of the food. Students with "I.Q.'s" high enough for entrance into a college are smart enough to budget their food allowances to advantage. It does not take them long to realize that the odd meal eaten at a reputable lunch counter puts elasticity into the budget and that lunch counters are able to furnish good food at a more reasonable rate than can campus dining rooms or cafeterias.

While there are many students who can afford to spend a reasonable amount for food, many potential customers are able to spend but 25, 35 or 45 cents for lunch or dinner. This is sometimes as true of the well-to-do students as of the less prosperous ones, for in a college with its many demands the student's allowance is frequently overdrawn and it is often necessary to eat an inexpensive lunch or dinner in order to leave sufficient funds for a glamorous date.

It, therefore, behooves the colleges to take thought of their food service in order to reclaim a lost clientele. No longer can food departments go on in the same old way. Change and progress go hand in hand. And up-to-date installation will resuscitate a waning business. A modern soda fountain and luncheonette in a popular location will put new life into the campus food service.

The lunch counter is no passing whim. It has come to stay. This fact is recognized by chain stores, bus terminals and drugstores in which lunch counters are operated with satisfaction to the customer and owner alike. There is bound to be a good return on the investment. The overhead is low, the menu is limited and the turnover is rapid. This is why some of the smartest Fifth Avenue department stores are turning to lunch counters on wheels or to "chuck wagon" tea rooms. They realize that in this department they will be sure of a profitable return.

Statistics are available that show that such an investment in a college will pay for itself in a short time. Intangible dividends, including student good will and satisfaction, will be among the assets. Nor will this type of service cut into the dining room and cafeteria revenue. The advertisement of one unit will arouse a new and keener interest in the older types of service. The entire restaurant department will receive stimulation. Customers who previously went elsewhere will soon become the university's regular patrons for they will understand that their needs are being met with satisfaction.

With the larger volume of business will come greater revenue. College dining halls and other food service departments do not want to operate at a profit but they do want to pay 100 cents on the dollar and balance their budgets. Red figures are an unnecessary evil and are all too readily accepted as the inevitable. The remedy can be found if trouble is taken to apply the knowledge gained through experience in this field.

Commercialism is not a factor in colleges and space is not always at a premium. Therefore, if tables and booths can be arranged in the room, together with a small center space reserved for dancing, the atmosphere will lend itself to many social gatherings.

A student cannot ask his "date" to a lunch counter after the football game but he can take her to the campus "hangout" and know that it is not going to cost him a fortune. Here on home territory will be supplied good food at reasonable prices, the privacy of a booth and nickelodeon music for dancing. It behooves our colleges to meet student demands.

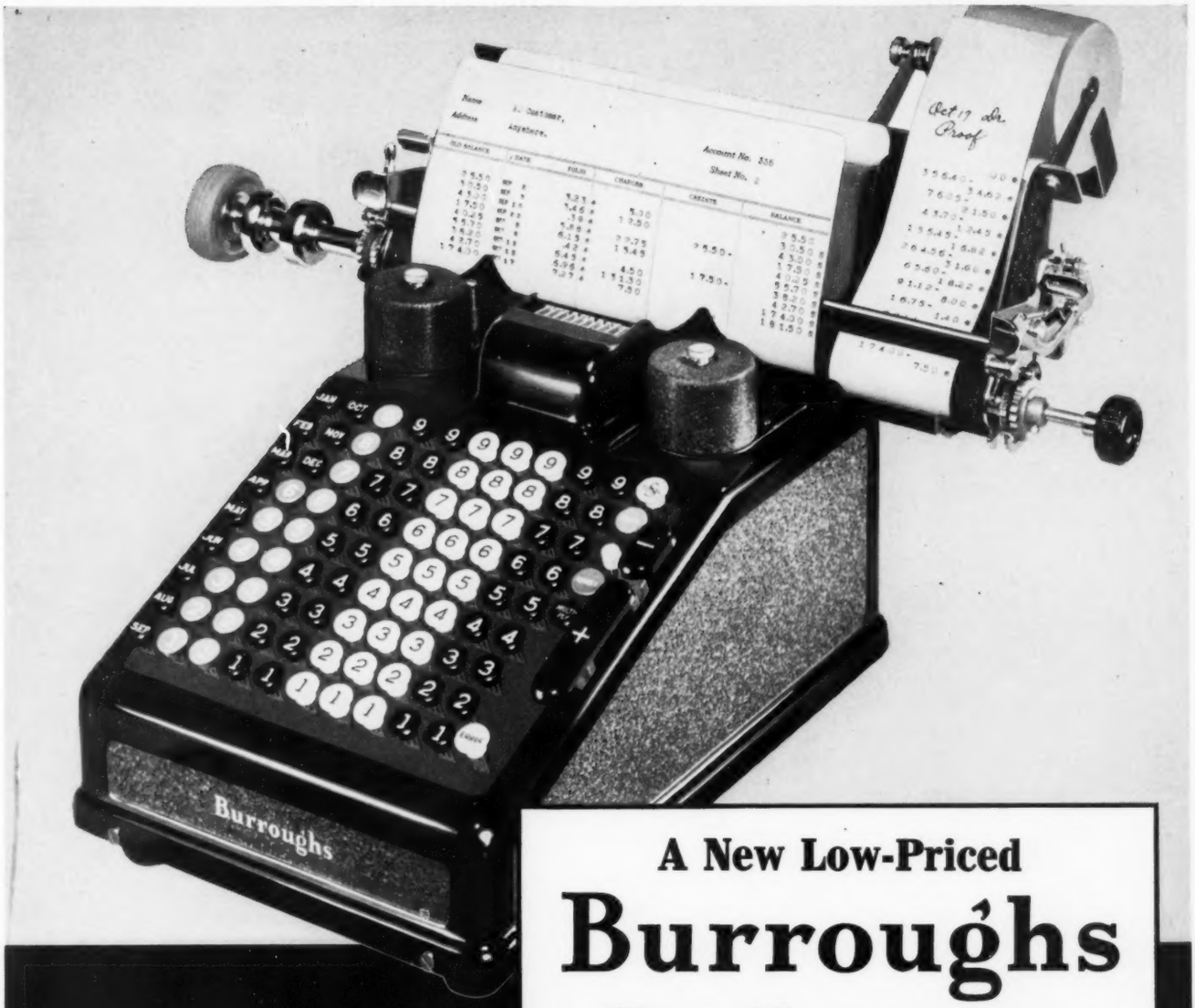
Biography of Doctor Rose

A biographical treatment of the life and work of the late Dr. Mary Swartz Rose is now being prepared by Clyde B. Schuman of the school of education, New York University, who has been at work on the project for several months. During the latter part of 1940 Miss Schuman obtained Doctor Rose's consent to begin work on the biography. However, all activities were suspended prior to and immediately following the death of Doctor Rose last February.

In March, with the approval of Doctor Rose's husband, Dr. Anton Richard Rose, Miss Schuman resumed her work on the proposed biography. In April she sent out questionnaires to all former students of Dr. Mary Swartz Rose whose addresses were then available.

Although 700 questionnaires have been sent out, Miss Schuman feels that there may be many students, as well as professional associates of Doctor Rose, who were not on the list and who might want to receive questionnaires so that they could assist with the work of compiling the material for the biography.

Miss Schuman will be grateful for assistance from readers of The NATION'S SCHOOLS who were once students or professional associates of Doctor Rose. She can be reached at 420 Riverside Drive, New York City.



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Radio's Rôle in Public Relations

CHARLES L. LANGSTON
Elementary Principal, Amarillo Public Schools, Amarillo, Tex.

AMARILLO, a city of 50,000 population, is located on the high plains of the Texas panhandle. Its school patrons are busy with the affairs of the day and spend little time visiting the schools. Besides private and parochial schools, Amarillo has two high schools, one for white and one for Negro pupils; three junior high schools, and 18 elementary schools, with a total enrollment of 10,000 pupils.

Believing that the elementary schools had the best opportunity to interpret their aims through a series of fifteen minute weekly radio broadcasts, a committee was appointed by the superintendent to formulate a plan and schedule of broadcasts for the school year 1939-40. Each elementary school was scheduled to have at least one program in the series.

The effectiveness of radio programs as a medium of interpreting the work of the schools to the parents was then analyzed. As a basis, 10 of the 14 topics in which Belmont Farley[1] had found parents to be interested were used. It was assumed that the interests of Amarillo parents followed the same pattern as those of parents living in other cities in the United States.

Certain underlying principles of public relations were observed in the broadcasts. The weekly programs informed the public in an unbiased manner. They were characterized by frankness and, except for special day programs, presented realistic classroom situations. Propaganda was carefully avoided.

Inasmuch as the programs were to be confined to pertinent information relating to the purpose, value and needs of education in Amarillo, it seemed appropriate to follow a pattern that could be developed and expanded in each successive broadcast. The curriculum core areas, with special programs for holidays, provided the nucleus for the broadcasts. The theme was "Today's Schools" and the programs included guidance, conservation, art, physical education, social studies, language arts, home efficiency, manual arts and special days.

The committee selected the parents as the specific audience. It was not assumed that other audiences were indifferent to the curriculum but it was thought that by addressing a certain audience the benefits could be more readily evaluated.

In order to appraise these programs, 5520 questionnaires were sent out. Of this total, 1447 were returned but 485 were discarded as incomplete. The remaining 962 replies form the basis for this report. The responses to each topic in the questionnaire are included in table 1.

The programs helped 76.05 per cent of the parents to understand the topics whereas 20.95 per cent did not receive direct benefit. There was considerable variation in the aid that parents admitted to receiving from the programs in understanding the topics. The arrangement of topics in the order of the amount of assistance that was received from the broadcast is shown in table 2. This order is based on the number of affirmative responses to the questions in the 962 questionnaires and shows the number and percentage of parents who stated that they had received assistance.

It will be seen that 185, or 20.4 per cent, more parents gained information about pupil progress and achievement than about attendance, the variation between the first and last topics in table 2. This variation might be attributed to the programs or it is possible that the parents had certain interests and gained assistance from the broadcasts in accord

Table 1—Responses to Each Topic in Questionnaire Giving Number and Percentage of Patrons Who Were and Were Not Assisted by the Broadcasts

Topic	Affirmative		Negative	
	No.	*Per Cent*	*No.*	*Per Cent*
1. Pupil progress and achievement	516	85.57	87	12.43
2. Methods of instruction	498	82.18	108	17.82
3. Health of pupils	377	71.00	154	29.00
4. Courses of study	453	80.17	112	19.83
5. Value of education	501	84.77	90	15.23
6. Child behavior	420	77.14	127	22.86
7. Teachers and school officers	401	70.95	134	25.05
8. Attendance	331	65.28	176	34.72
9. School buildings	349	68.56	160	31.44
10. School program	463	83.12	94	16.88
	4309		1242	

Table 2—Order of Topics Based on Number and Percentage of Patrons Assisted*

Topic	*No.*	*Per Cent*
1. Pupil progress and achievement (1)	516	56.0
2. Value of education (5)	501	54.3
3. Methods of instruction (2)	498	54.0
4. School program (10)	463	50.2
5. Courses of study (4)	453	49.1
6. Child behavior (6)	420	45.5
7. Teachers and school officers (7)	401	43.4
8. Health of pupils (3)	377	40.8
9. School buildings (9)	349	37.9
10. Attendance (8)	331	35.6

*Numbers in parentheses indicate position in Farley Study.

[1]Farley, B. M., "What to Tell the People About the Public Schools," p. 16.

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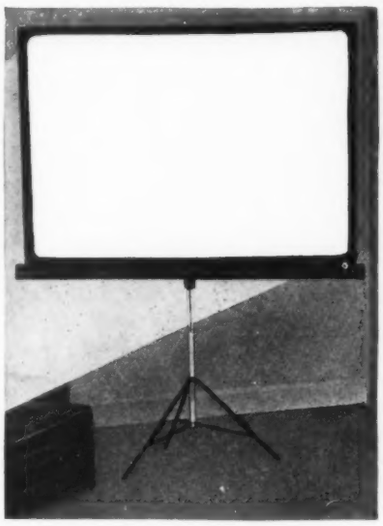

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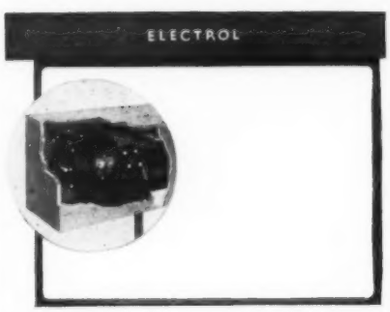

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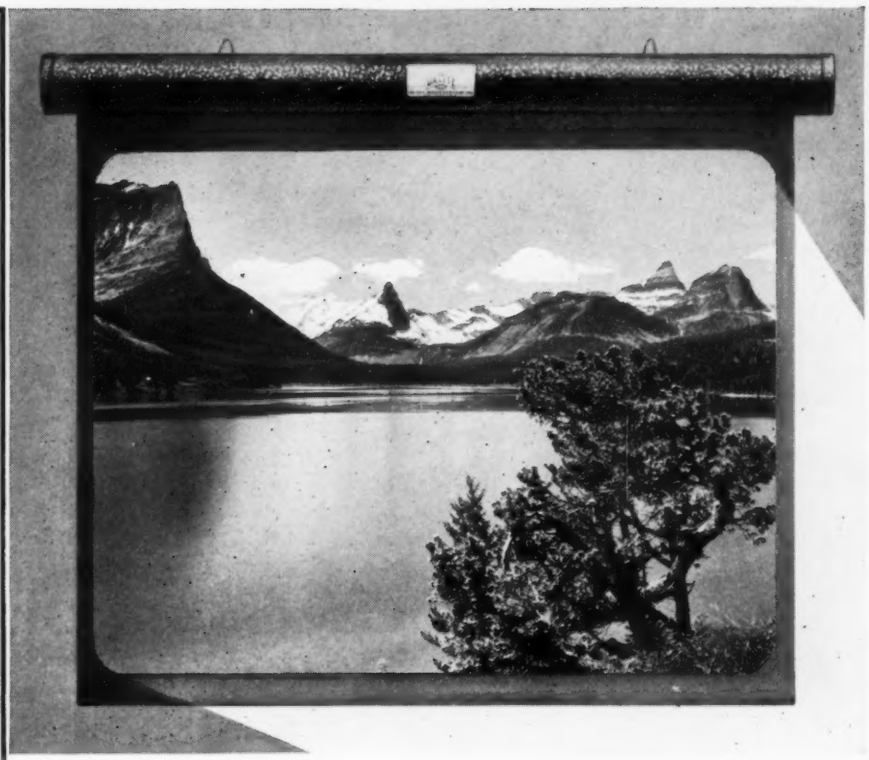

"The DA-LITE GLASS-BEADED SCREEN is 'TOPS' for Kodachrome Projection"

O. J. McGILLIS

GREAT NORTHERN RAILWAY

Now being used in showing Great Northern's gorgeous color movie "In All the World"

This expert portrayal, in sound-and-color motion pictures, of a 3-day trip through the Glacier-Waterton International Peace Park gives tourists a most attractive "preview" of the superb scenic beauty of this glorious vacationland.

In presenting this film through its passenger traffic offices, Great Northern Railway uses Da-Lite Screens exclusively. Mr. O. J. McGillis, Advertising Manager, writes—"We have always used Da-Lite Screens for showing our color films, for we find the *Da-Lite Glass-Beaded Screen is 'Tops'* for Kodachrome projection. It brings out the full brilliance and true colors of color film as no other surface can. We use an 8 ft. x 10 ft. screen and a number of 52" x 72" Challengers. Because there is considerable amount of traveling in showing our films throughout the country, we greatly appreciate the ease and convenience with which Challenger Screens are handled in transit. *We use Da-Lite Screens exclusively.*"

For perfect projection of your visual teaching material specify Da-Lite Screens—the result of 32 years of leadership in screen manufacture. The Da-Lite line offers schools a complete selection of surfaces, styles, and sizes to meet every projection requirement. Write for literature! Dept. 9 TNS.

DA-LITE SCREEN COMPANY, Inc.

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with these interests. Although the primary purpose of this study was to learn whether or not parents learned about the school through the medium of the radio, it is noteworthy that the interests of the patrons of Amarillo elementary schools do not follow the same order as was found in Farley's study.

The local data are too limited in regard to number of responses cited, the duration of the experiment and the scope in territory covered to make independent conclusions of great value. However, when considered in the comparison with established principles of public school relations, the following conclusions are evident:

1. Interest in the welfare of their own children makes parents an acceptable audience to whom the work of the school may be interpreted most effectively.

2. The radio programs of the elementary schools can be used to impart pertinent facts about the schools to the parents. Propaganda can be eliminated and realistic situations from the classroom and the school can be made the basis for the broadcasts.

3. The broadcasts were not of equal assistance or interest to the patrons of the elementary schools of Amarillo in understanding the topics concerning school matters. Again, it may be that the responses of patrons represent interests occasioned by local school conditions.

4. The number of affirmative responses should provide an index to the continued interests of parents in the topics relating to school matters, although the interests may not follow the same rank as was found for the parents questioned in the study made by Farley.

5. The data presented indicate that, in addition to the radio, other agents should be used in a school public relations program. Although many of the questionnaires were not returned, this does not mean that the patrons who failed to return a questionnaire did not listen to the broadcasts.

6. From the findings listed, it seems practical for the elmentary school radio programs to be made a part of the public relations program of the Amarillo public schools.

From a study of the reaction to the broadcasts given in 1939 and 1940, it seemed evident that some changes in organization would strengthen the programs. The audiences, and especially the parents, were more interested in hearing the broadcasts of their own schools than they were in listening to the programs of schools in other sections of the city. Too, a school with a small enrollment felt that it could not compete in program interest with a school that had a larger student body and, therefore, more talent from which to draw. Furthermore, the junior and senior high schools had their schedule of broadcasts independent of the elementary schools and it was thought best to bring all of these broadcasts together under a central committee.

During 1940 and 1941, therefore, the broadcast programs for all the schools were built as a unit around a single subject:

The American Way of Life

Primary Division
- Thanksgiving Is American
- Safety at Christmas
- Civic Beauty
- Contributions of Other Countries to Ours
- Christmas Customs

Elementary Division
- A Nation of One People From Many Lands
- The Melting Pot
- Our Natural Resources
- The Cradle of Democracy
- The Growth of Democracy

Junior High Division
- Living in a Democracy—Recreation
- A State in a Democracy—Texas

Junior and Senior High Division
- Making the Most of Our Opportunities
- Place of Health in National Defense
- Juvenile Delinquency
- How to Choose a Vocation
- How to Choose a College
- Easter

Each school division was represented by a member on the central radio committee, and a chairman and two assistants were selected for each program from the divisions of the school in which they taught. For example, not only did the primary division have a member on the central committee, but all persons working with the primary programs were selected from this department of the school system. The program committee wrote the script based on some phase of school or community life, read it before the central committee, arranged for an audition at the radio station, selected and instructed the characters. The central committee approved every script at least three weeks before it was to be broadcast and made certain that there was continuity of thought between the programs.

The practicability of this procedure seems apparent. All schools shared and shared alike the success or failure of each program. The individual school was no longer responsible for an entire broadcast. The programs had become the Amarillo schools' program and showed the work that was being done in the schools as a whole. Furthermore, the programs compared more favorably with professional radio programs. The committee had a wider choice in the selection of characters and the script was prepared by persons skilled in handling subject matter and materials of the school divisions in which they were working.

Visual Instruction Officers

The following new officers and zonal presidents of the department of visual instruction of the National Education Association have been named to serve for the coming school year:

President, W. Gayle Starnes, University of Kentucky, Lexington, Ky.; first vice president, Camilla Best, Orleans Parish School Board, New Orleans; second vice president, U. S. Burt, Oregon State College, Corvallis, Ore., who is also president of zone 6.

Other zonal presidents are: James R. Brewster, Harvard University, zone 1; Ella Callista Clark, Winona State College, zone 5; L. W. Cochran, University of Iowa, zone 4; E. Winifred Crawford, Montclair City Schools, zone 2; Ford L. Lemler, University of Michigan, zone 3; Charles F. Milner, University of North Carolina, zone 10; W. T. Powell, El Paso City Schools, zone 11; Boyd B. Rakestraw, University of California, zone 7, and Lelia Trolinger, University of Colorado, zone 8.

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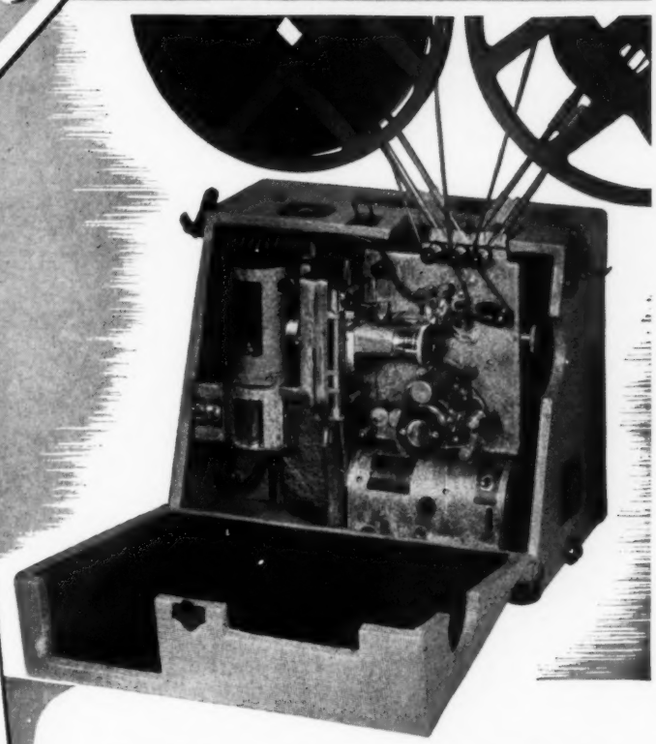

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1 PATENTED SAFETY FILM TRIP — Film is automatically protected against damage at every point where emergency might arise. EXCLUSIVE.

2 SWING OUT LENS MOUNT — Easy access to film channel and aperture plate for removal of dirt and grit. Prevents scratches and abrasions. ANOTHER VICTOR EXCLUSIVE.

3 DUAL FLEXO PAWLS — This vitally important feature prevents damaging film perforations. Victor pawls will "spring-over" instead of punch holes in film.

4 OFFSET FILM LOOP — Provides simplest threading, permits film to flow naturally on one side of channel—prevents "screen image weave" and makes possible Victor's exclusive single over-sized feed sprocket for still greater film protection.

5 SPIRA DRAFT LAMP HOUSE — Unmatched efficiency — long lamp life — no over-heating of mechanism and projector body because of exclusive spiral draft action produced by unique lamp house and fan construction.

6 VICTOR AMPLIFIERS — Finer sound fidelity has been achieved through construction in Victor's own sound laboratories, where engineers specifically design for 16mm film requirements.

7 TWO STABILIZING FILTERS — In Victor's Sound Head construction, two separate revolving filters are used. No film speed variation can occur. Result — the World's finest sound reproduction. No additional gadgets or snubbers required.

8 NO REFOCUSING FOR COLOR — Victor's stationary Sound Drum is unique because exciter lamp can project a collimated beam through a wide angle lens that entirely eliminates necessity for making adjustments. No separate sound lens for color or reversed prints. No extra cost—No added confusion.

9 PHOTO ELECTRIC CELL — Variable voltage control is vitally important because it assures high efficiency and extra long cell life without over or under load.

10 JACKS — Simple plug-in attachments for large booster amplifiers, extra speakers, microphones and record turntables. All accessible from outside of the case.

11 MULTIPLE-USE DESIGN — Exclusive extra feature. Units can be added to basic sound projector making available combinations to perfectly care for every requirement. One projector unit serves all purposes.

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The Victor Animatophone Sound Motion Picture Projector with its ***MULTIPLE-USE UNITS*** — EXCLUSIVE WITH VICTOR — is the ultimate in projector design. ***"BUILT INTO"*** the Animatophone are features backed by Victor's thirty-two years of experience and leadership. It incorporates every feature known to the industry plus many extra exclusive refinements.

With Victor there is NO COMPROMISE WITH QUALITY — NO PREMIUM IN PRICE.

For additional information about other features, ask for "TWENTY-SIX REASONS FOR VICTOR ANIMATOPHONE SUPREMACY" and new catalog form No. 1050.

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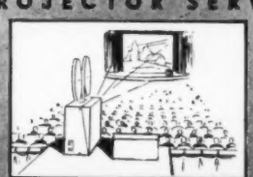

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ANIMATOGRAPH CORPORATION

Dept. C-1 Davenport, Iowa

CBS to Broadcast Survey of History of Americas; Textbook in Preparation

"Lands of New World Neighbors," the first textbook to be prepared for use in classrooms in connection with school broadcasts, will be published by the middle of September, it has been announced by the Columbia Broadcasting System. The book was written by Hans Christian Adamson, assistant to the president of the American Museum of Natural History, and is to be used in conjunction with the broadcasts, "New Horizons," the Wednesday geography and science series of the CBS.

The scope of the series will be broadened to include a historical survey of all the Americas, from Canada to Chile. The first broadcast on October 8 will set the pace with a dramatic presentation of the discovery of the New World by Columbus.

Subsequent broadcasts will tell the story of the growth of the various countries of the Western Hemisphere from the days of the explorers and conquistadors up to and through the era of their struggles for freedom and independence.

Mexico Is Host to First CBS Latin American School of Air

The Mexican government played host to the first Latin American conference of the "School of the Air of the Americas" at the Mexican National Palace of Fine Arts, Mexico City, August 14 to 16. The meeting was attended by approximately 1000 educators, government officials and radio men from Latin America, the United States and Canada.

The program included demonstrations of the broadcasting and classroom use of several programs of the School of the Air and addresses by Secretary of State Ezquiel Padilla, Secretary of Education Luis Sanchez Ponton and other leading officials of Mexico.

Radio Improves Reading Habits

Psychological tests given to Texas high school pupils in 28 state-wide quizzes prove that radio broadcasting has resulted in increased leisure reading and interest in research, according to Dr. A. L. Chapman, director of the University of Texas bureau of research in education by radio. The bureau is engaged in making a study of the effectiveness of the university's educational radio programs. Five years from now, Doctor Chapman prophesied, the university will know more about the reading habits of high school pupils and how to encourage them through radio than any other educational center.

Series of Records on the Constitution to Be Released

On September 1 a new series of recorded programs on the Constitution of the United States will be made available without charge to schools and radio stations by the Institute of Oral and Visual Education, Radio Division, 101 Park Avenue, New York.

The backgrounds of the Constitution, the compromises that were made before it was adopted, the Bill of Rights and some typical Supreme Court test cases are presented in dramatized form.

Films in Review

MODERN FOOTBALL FUNDAMENTALS: 16 *mm., silent.* 400 *feet.* 2 *reels.* 15 *minutes per reel. Eastman Teaching Films Inc. Subject, physical education. Grades: junior and senior high school. Rating B.*

The film opens with the kickoff, which is followed by a play or two. Exercises for conditioning and warming up are shown. Both slow motion and regular motion are used to show the sidestep and the straight arm. The stance of the backfield men and the pass from center are stressed, as are several specific types of plays, such as falling on the ball, handling the pass from the center, the spinner play and the lateral pass.

Blocking is emphasized as the foundation of the offense and various types of blocks are shown. Types of tackling are illustrated both with the dummy and during actual play. This is done in slow and suspended photography. In the forward pass, the method of holding the ball for passing and the method of receiving the pass are included.

This film might be used for teaching good technics in football. It would probably fit into a school in which the coach has not had much experience in the fundamentals of good football better than it would in a school that has a more experienced coach. For the most part the photography is good although some of the scenes are faraway shots and group action rather than individual action is shown. There is plenty of motion, in some cases, perhaps, so much that the film should be shown more than once to be effective. — *Reviewed by* WILLIAM O. MAYROSE.

MILK AND HEALTH: 16 *mm., sound.* 250 *feet.* 1 *reel.* 8 *minutes. March of Time. Subject, health. Grades:* 4 *to* 12. *Rating B+.*

"Milk and Health" shows the development of the present system of milk marketing and some of the reasons for this development. It also shows how this food, long a spreader of disease, is safely distributed.

First, we see the insanitary methods of caring for milk that obtained about half a century ago. At the time of the typhoid epidemic in Springfield, Mass., the disease was traced to the milk supply. This revolutionized the milk industry. At the turn of the century the first milk bottle was used. Pasteurization was required in large communities. The cow-testing program was carried out regardless of the opposition of many farmers.

Next, a series of scenes traces the milk from the farm to the shipping center, to and through the distributing plant and, finally, to the public, each step taking place under most sanitary conditions.

This picture tells its story briefly but effectively. It can be used at any grade level from the later elementary grades on through high school. The photography is good.—*Reviewed by* MARGARET STEVENSON.

Film Releases

Metal Working Lathe, Plain Turning — The first two of a series of 16 mm. sound motion picture films based on the book, "How to Run a Lathe." Produced in full color by Burton Holmes Films, Inc., these pictures represent the most advanced technic for teaching lathe operation in industrial and vocational schools, universities and Army and Navy training stations. 800 feet. South Bend Lathe Works, 425 East Madison Avenue, South Bend, Ind.

The Etcher's Art — 16 mm. silent film in 2 reels. Frank W. Benson, famous for his etchings of wild fowl, takes a plate through the steps in the process, including the transference of the pencil sketch; the acid bath; the method of stopping out certain lines with shellac; printing the final proof, and destroying the plate in the case of limited editions. International Film Bureau, Inc., 59 West Van Buren Street, Chicago.

Story of Civilization — Seventeen new 4 reel, 16 mm. sound films comprise this series. Each of the 17 units is complete in itself. For example, the "Story of Transport and Travel" traces the development of transportation from the days when the camel and horse were the fastest modes of travel up to the present day of airplane and streamlined train. A complete list of the films can be obtained from Minter Culver, 55 East Seventy-Third Street, New York City.

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"I WANT ONE THAT PLAYS AT 78 R. P. M."

THIS RCA PORTABLE PHONOGRAPH PLAYS RECORDS OR TRANSCRIPTIONS AT *Both* SPEEDS!

THIS versatile RCA portable phonograph, Model MI-4828, will meet all your requirements. It not only reproduces records of any size, up to and including 16" transcriptions, but also plays them at either 33 1-3 r.p.m. or 78 r.p.m.—whichever you wish! Both speeds are variable.

True tracking crystal pickup and tone arm, revolutionary new RCA Accordion Cone speaker and generous length of cable, which permits placing the speaker wherever you choose for best sound coverage, give you high quality performance that will please the most critical ears.

The amplifier unit has a high gain 6 watt amplifier, especially designed for use with either records or microphone, and may be used separately as a portable public address system.

In addition to the variety of services it offers, this RCA phonograph is amazingly low in cost. Send coupon today for new catalog describing it — and other RCA Sound Equipment—in detail. No obligation, of course.

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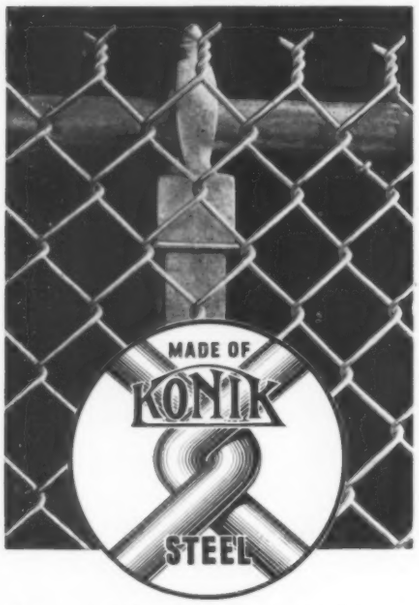

When you buy fence protection for any institution, remember that only Continental Chain Link fence has fabric made of KONIK—a new steel containing copper and chromium for greater strength and rust resistance "clear through." With Continental fence you get sturdier posts, bracings and fittings.

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A Teacher's Creed

IN THE tremendous crisis that is facing America as a nation of free people, the teachers of the public schools of this country offer a solemn and considered pledge to the great public that supports and protects our democratic system of education.

We teachers of boys and girls believe in complete and unswerving loyalty to the principles laid down by our forebears for the guidance and understanding of the citizens of democracy.

We believe that the public schools of America are the first line of defense for democracy and an essential protection for the American way of life.

We believe that through the public schools the youth of America is guided and guarded in the decisions that lie ahead for all of us.

To this end we reiterate and reaffirm our own personal faith in the future of America and our eternal loyalty to American institutions.

We pledge our highest efforts to teach the fundamental doctrines that have made America strong and held her steadfast in her hours of peril.

We pledge our greatest abilities in bringing an increased understanding of democracy to every boy and girl.

We rededicate our services, without question of time or effort, for work with every agency that is trying to carry forward the ideals of democracy and we pledge our endeavors so that our country may go forward with complete confidence that our boys and girls will carry on the faith that is the heritage to us from those who have gone before.

• •

AT THE PEARLY GATES

The golden gates were open wide
With harps resounding there,
An angel chorus just inside
Was jazzing up the air.

But, look! a straggling soul applies
To crash the pearly gate.
Without much confidence, he tries
To learn his final fate.

The Keeper eyes the stranger hard
"And who art thou?" asks he;
"Have you your Progress Record Card?
Your Bachelor's Degree?"

The weary soul speaks haltingly,
As fearful of disaster,
"On yonder dizzy earth," says he,
"I served as a Schoolmaster.

"I ran a Central School or two,
A superintendency,
By school boards hired with much ado
And fired with frequency.

"For many years I played the game,
According to the rules,
For many years I took the blame
For many different schools."

"Come in! Be ye no longer sad,"
The Keeper said with glee;
"It's evident, my friend, you had
Your hell on earth," says he.

• •

DESPITE all the efforts of self-appointed Friends of the Public Schools and mighty organizations, such as the Sons of Blitzkriegs for Policing the Educational World, there is some evidence that subversive textbooks have crept past the dreamy-eyed, naïve school administrators to the harm of young America.

A recent example of the insidious work of book publishers comes from a midwestern city in which the battle of the books has been raging.

Some brilliant thinker conceived the idea of asking the kids themselves whether they were being subtly seduced by doctrines in the books provided them.

Ninety nine and a half per cent said "nerts," or words to that effect. But behold! the half of one per cent, a fair-haired, bright-eyed youngster, admitted he had been led astray.

"In what volume did this occur?" asked the investigator in his best Bug-in-a-Rugg manner.

"In the 'Man Without a Country'," cheerfully answered the half of one per cent.

The answer was duly recorded for the benefit of those who view with alarm, although no serious attempt has yet been made to ban the offending volume.

Practical... Attractive... and EFFICIENT!

Heywood-Wakefield Tubular Furniture is practical in design and efficient in use. This good looking furniture saves valuable space without loss of comfort. It promotes classroom cleanliness and induces comfortable, correct posture. H-W Tubular Furniture adapts itself to any room and to any type of architecture. It is now available in pleasing Taupe, School Furniture Brown, or Hunter Blue finishes. May we furnish details?

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is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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News in Review

F.W.A. Money for Schools

Grants and contributions from the federal government will be available for the equipment and operation of community services, including schools, hospitals and recreation centers, by the enactment of H.R. 4545, which provides funds for the procurement and operation of community service facilities in defense areas.

The bill, as originally introduced, restricted the activity of the federal government to instances in which the facilities "cannot otherwise be provided." The Senate amended the bill to include instances in which the facilities could not be provided without imposing an "increased excessive tax burden or an unusual excessive increase in debt limit of the taxing or borrowing authority in which such shortage exists." The House of Representatives accepted the Senate amendments and the act was signed by the President on June 28.

The act contains the following prohibitory clause regarding any schools that may be provided under it: "No department or agency of the United States shall exercise any supervision or control over any school with respect to which any funds have been or may be expended pursuant to this title, nor shall any term or condition of any agreement under this title relating to, or any lease, grant, loan or contribution made under this title to or on behalf of any such school, prescribe or affect its administration, personnel, curriculum, instruction, methods of instruction or materials for instruction."

The Federal Works Agency has tentatively divided the country into 11 districts in which there is to be an agent of the Federal Works Administrator. Interested groups should contact these agents in their offices in the following cities: Boston; Philadelphia; Richmond, Va.; Jacksonville, Fla.; Detroit; Chicago; Kansas City, Mo.; Fort Worth, Tex.; Denver; Los Angeles, and Seattle.

NATIONAL DEFENSE

Youths Back National Defense

Nine out of ten among thousands of young people interviewed in a recent survey made by the National Youth Administration indicated their willingness to support the national defense program, according to Charles W. Taussig, chairman of the N.Y.A. national advisory committee. Furthermore, two thirds of them have a clear idea about how they can help and more than 70 per cent offered concrete suggestions for the improvement of the defense program.

Young people between 16 and 25 were asked: "What can you do for your community to strengthen the program of national defense?"

A sample analysis of 2602 of the 15,000 replies received from 33 states indicates that 70 per cent of the youth are aware of the seriousness of the defense program and have definite suggestions regarding youth's part in it; 21 per cent are willing to cooperate but lack definite ideas as to the means; 9 per cent indicated lack of interest or failed to fill out the blank. Only 10 out of the 2602 definitely opposed the national defense program.

MEETINGS

N.A.P.S.B.O. Program Outlined

Members of the National Association of Public School Business Officials will gather for their annual session in Atlantic City, October 13 to 16. Headquarters is the Hotel Ambassador.

Monday morning will be devoted primarily to reports, election of new members and the appointment of committees. Alexander J. Stoddard, chairman of the Educational Policies Commission and superintendent of schools, Philadelphia, will address the convention on "The Rôle of the Schools in the World Conflict."

At the general session on Tuesday morning, John K. Norton, professor of education, Teachers College, Columbia University, will discuss the problem of "Building a Financial Structure for an Adequate Program of Public Education." Another speaker on this program will be Theodore J. Kreps, professor of business economics, Stanford University, who will talk on "Economic Aspects of National Defense."

Sectional meetings will occupy the delegates on Tuesday afternoon. Subjects to be covered at these meetings and at the round table panel in the evening will include retirement for noncertificated personnel; liability for school accidents; personnel problems; community use of school buildings and grounds, and maintenance problems.

On Wednesday morning, T. Alfred Fleming of the National Board of Fire Underwriters will speak on "Fire Prevention in the Public Schools," and Willis A. Sutton, superintendent of

schools, Atlanta, will discuss "Business and Education."

Round table discussions at the Wednesday afternoon session will deal with such problems as instructional and office supplies; custodian and engineering problems, and accounting.

The type of construction that should be used in school buildings to be erected in connection with the national defense program will be outlined by Ralph Hacker, architect of Fort Lee, N. J., at the Thursday sectional meeting on buildings and grounds. John W. Lewis, assistant superintendent, Baltimore, will discuss Mr. Hacker's paper. Other sectional meetings will be held on finance and accounting and purchasing.

The meeting will close Thursday afternoon with a panel discussion of "Criteria for the Measurement of Public School Business Administration," and an address by Harry Howell, director of budget, Los Angeles, on "Interpreting the School Budget to the Taxpayer."

Nursery Education Group to Meet

The problem of providing "life, liberty and happiness for children now" will be the center of discussion at the biennial conference of the National Association for Nursery Education in Detroit, October 24 to 27.

Special emphasis will be laid on the necessity for helping nursery education to find its place in community life. Research findings that affect nursery school practices will receive attention in all groups. Topics are also scheduled dealing with the everyday problems of the nursery school worker. The last conference of the session will be devoted to the subject of "Children in a World at War."

ADMINISTRATION

Chamber of Commerce Undertaking

In an effort to focus public attention more effectively on current educational problems the United States Chamber of Commerce has announced the appointment of a committee on education that will work in cooperation with a similar committee of school administrators appointed by Dr. W. H. Pillsbury, president of the American Association of School Administrators.

The joint program of the two committees includes among its objectives the removal of all grounds for suspicion regarding the prevalence of subversive activities in the school system; vitalizing of courses relating to the American system of government, and the encouragement of religious and moral training.

It is proposed that local committees of business men and superintendents of schools be set up to formulate programs

A New Class — A New Semester, BUT

the same old

MAINTENANCE PROBLEMS!

For better than a third of a century MIDLAND has been helping to make Schools cleaner, healthier places to return to after Summer vacations, but its aid does not stop there. During the school year, when cleaning must be done after classes have been dismissed for the night, the following MIDLAND PRODUCTS assist the custodian in making a more thorough cleaning in less time and with greater economy. . . .

MID-CEDAR A Cedar Oil preparation to be used in the treatment of dry mops. If regularly used, it will eliminate many unnecessary wet moppings and aid in the preservation of wood floors. Its polishing action leaves no sticky film with which to attract dust.

MID-CEDAR is also indispensable in the dusting of desks and furniture, and its economy is second only to its sanitary qualities.

GLEEMZ A modern, liquid, synthetic cleaner that is fast acting and harmless to any surface not injured by ordinary water. It contains no oils, caustics, fats, alkalies or abrasives, and will rinse quickly and completely.

Until you have tried GLEEMZ you cannot know how great has been the advance made in soapless cleaners.

MIDLAND also manufactures a complete line of seals and gym floor finishes, liquid hand soaps, disinfectants and insecticides.

Illustrated below is the Midland FLOORMASTER, a Cotton Strand Mop especially adapted for use with MID-CEDAR. The FLOORMASTER can be used on either side of the cap and is easily removed when washing is required. It floats ranging from twelve to twenty-four inches, which gives a cleaning spread of from eighteen to thirty inches. Complete with a five foot hardwood handle and a hardwood mop block.

MIDLAND CHEMICAL LABORATORIES
INCORPORATED
Dubuque, Iowa, U. S. A.

centering upon present day problems.

In a statement to the U. S. Chamber of Commerce, the committee on education declared that "new conditions require a constantly evolving educational program if the public schools are to keep pace with changing public needs. We commend the superintendents of schools and the great body of teachers for their progressive and efficient methods of education. We propose that even closer cooperative relationships be established between the superintendents of schools and the business men of their respective communities in order that necessary adjustments in educational methods may be properly appreciated by the public and that the pupils may get the most out of the opportunities offered to them by their local schoolmen."

Teacher Shortage Traced to Defense

Missouri is faced with a shortage of primary and secondary school teachers, particularly in the fields of music, science, coaching, commerce and industrial arts, it was revealed recently. Defense training jobs are attracting industrial arts teachers; civil service is taking commerce instructors, and physical education jobs in training camps have taken many of the coaches.

According to R. L. Davidson Jr., director of the extension division and head of the University of Missouri committee on teacher recommendations, the shift in teacher personnel will not end when school begins but will continue through the school year.

Youth Are N.Y.A. Advisers

Four young spokesmen representing various groups in the National Youth Administration have been appointed by President Roosevelt to membership of the N.Y.A. national advisory committee. Esther Ekblad, Salina, Kan., will represent the interests of farm youth; Carroll M. Leevy, Columbia, S. C., will represent Negro youth; Louise Morley, New York City, will represent student youth, and James R. Herrington Jr., College Park, Ga., will be spokesman for N.Y.A. youth.

N.Y.A. Funds for 1941-42

National Youth Administration funds for the continuation of the student work program during the academic year 1941-42 will total $21,099,125, some $5,000,000 less than was allocated last year. The fund will provide part-time work for approximately 500,000 youths between the ages of 16 and 24. A special allocation of $85,000 has been made for the N.Y.A. program of aiding Negro college and graduate students.

Fascist and Democratic Teaching

The effects of governmental philosophy upon education in Germany, Italy and Soviet Russia are reviewed and contrasted with educational trends in the United States in "Education Under Dictatorships and in Democracies," the new publication of the U. S. Office of Education. The pamphlet, the fifteenth in a series of 27 being issued under the general title, "Education and National Defense," is based on firsthand study of Italian education by Dr. James F. Abel, chief of comparative education.

INSTRUCTION

Founds Lectureship at Syracuse

Establishment of the J. Richard Street lectureship on education has recently been announced by the school of education, Syracuse University. Founded in honor of the first dean of Syracuse University Teachers' College, the lectureship is financed by the late Doctor Street's son, Dr. W. Walter Street, a physician in Syracuse.

Dean Harry S. Ganders delivered the first in the series of lectures on July 17

SPAL DOES 3 JOBS soap can never do!

Streaks and surface film vanish . . . dirt floats away. There's a sheen on the floor—lustrous—protective. With one sweep of the mop, your janitor completes 3 jobs soap can *never* do!

That's the sort of cleaning job Spal does. It's fast . . . it's thorough . . . it's *safe* to use . . . and it gives you economies that count.

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So get the facts about Spal. Make an actual "on-the-job" test and prove to yourself that Spal is made to give you *three times* more work, in less time, and at a lower cost, than any other cleanser you've ever used.

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Gives Floors a Lustrous Polish!

Leaves a Film of Surface Protection!

Spal is safe to use on all types of flooring. Approved by leading manufacturers.

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to visitors attending the university's educational conference. He spoke on the subject, "Education for War and Peace."

Are Independent Thinkers

Unusual independence of thought was revealed by the children who answered a questionnaire that was recently sent out by William T. Reed, Chicago candy manufacturer. In an effort to obtain a clear and unbiased picture of the opinions and tastes of the average American child between the ages of 8 and 13, the questionnaire was sent to children in all parts of the country and from families of all income brackets.

Answering questions ranging from current problems to their favorite foods and literature, the children revealed that they have decided opinions of their own that are not influenced by the ideas of their parents and teachers.

The outstanding indication of this was given in the answers to the question: "Do you think that the United States should go to war against Germany now?" Twenty-seven per cent voted yes compared to the 21 per cent of the adult population that voted for war in the Gallup poll conducted at about the same period of time.

Economic Status Affects Negroes

The theory held by psychologists that Negroes are potentially capable of matching other groups in test performances of intelligence was substantiated in a survey of Negro students made by Dr. Herman George Canady, head of the psychology department of West Virginia State College for Negroes.

Doctor Canady divided the 497 students studied into three groups according to their social and economic status. He found that the highest grades went to the group with the highest family background and that there were similar correlations for the other factors studies. These findings, Doctor Canady stated, parallel similar findings among white

TAKE A CRITICAL LOOK AT YOUR WASHROOMS

IT'S DOUBLY IMPORTANT these days to have good washroom facilities. First, of course, because it's an obligation to your pupils. Second, because the growing use of schools as community centers naturally attracts adults to your buildings. And adults are sure to expect up-to-date facilities for washing faces and hands.

Take a critical look at your washrooms. If they're not all they should be, here's a suggestion. Consider Ivory Soap Dispensers.

These modern soap dispensers will do a lot to give your washrooms that up-to-date look. They're attractive. They invite use. For they deliver a soap known and liked from coast to coast—pure, gentle Ivory Soap.

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Coming Meetings

Sept. 29-Oct. 3—National Recreation Congress, Baltimore, Md.

Oct. 3-4—Winfield Educational Clinic, Winfield, Kan.

Oct. 9-11—Utah Education Association, Salt Lake City.

Oct. 13-16—National Association of Public School Business Officials, Atlantic City, N. J.

Oct. 16-18—Wyoming Education Association, Cheyenne.

Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.

Oct. 22-25—New Mexico Educational Association, Albuquerque.

Oct. 23-24—Minnesota Education Association, Municipal Auditorium, St. Paul.

Oct. 23-24—New Hampshire State Teachers Association, Nashua.

Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.

Oct. 24-25—Maryland State Teachers Association, Baltimore.

Oct. 29-31—West Virginia State Education Association, Charleston.

Oct. 29-31—North Dakota Education Association, Minot.

Oct. 29-31—Maine Teachers Association, Bangor.

Oct. 29-Nov. 1—National School Cafeteria Association, San Antonio, Texas.

Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.

Nov. 6-8—Conference of Food Service Directors, New York City.

Nov. 6-8—Iowa State Teachers Association, Des Moines.

Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.

Nov. 7-9—New Jersey Education Association, Atlantic City.

Nov. 10-13—National Council on Schoolhouse Construction, Cavalier Hotel, Virginia Beach, Va.

Nov. 13-15—Arizona Education Association, Phoenix.

Nov. 18-21—Virginia Education Association, Richmond.

Nov. 20-22—Texas State Teachers Association, Houston.

Nov. 26-29—Missouri State Teachers Association, St. Louis.

Dec. 29-31—Pennsylvania State Education Association, Harrisburg.

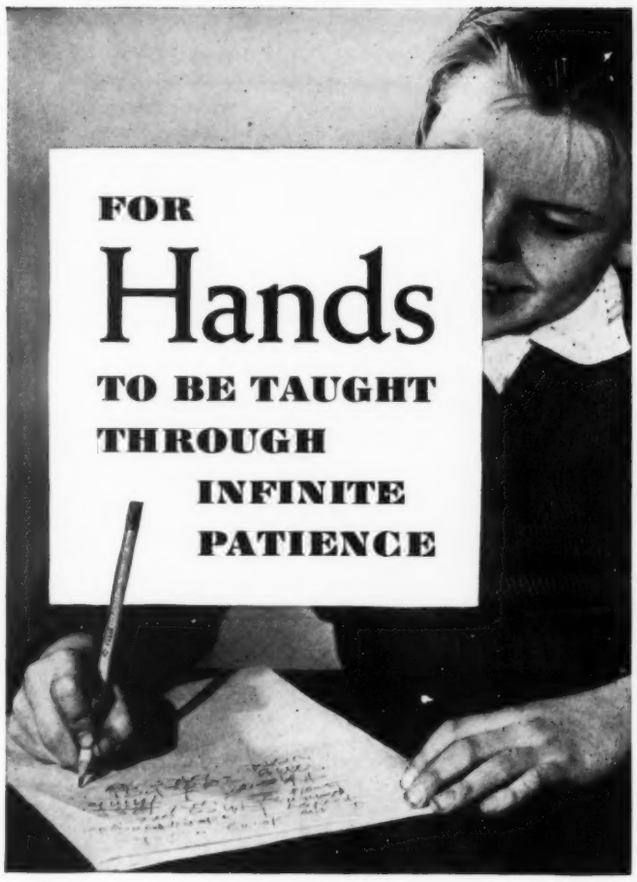
Dec. 29-31—Illinois Education Association, Chicago.

Feb. 20-21—National Advisory Council on School Building Problems, St. Francis Hotel, San Francisco.

Feb. 21-26—American Association of School Administrators, San Francisco.

Feb. 26-28—American Association of Junior Colleges, Los Angeles.

April 8-10—Inland Empire Education Association, Spokane, Wash.



NOT out of books but out of teachers' nerve-wearying patience are hands given their essential education. We make the point to emphasize once again the responsibility which centers in the selection of pencils for the purpose. Quality which will enable the child to work without pencil-consciousness is the basis of effective teaching effort.

Eberhard Faber has been notably successful in providing quality beyond the average in every kind of pencil required—whether for the advanced art student or pupil in the elementary grades.

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SPEED. The Brandt makes change in a split second. To operate this machine it is necessary to press but one key—the key corresponding to the student's check.

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students and indicate that the low standard of living among Negroes, resulting from limited opportunities, is the cause for continued inferiority in educational work for the majority of Negro students.

How to Improve Reading Habits

Teachers who are acquainted with the more lurid literature that is read by teenage children are better able to direct the reading of their pupils into more challenging and profitable channels than are those who know only the belles-lettres type of literature.

This conclusion was stated by Walter Loban, instructor in education at Northwestern University, after a survey of pupils and teachers to discover what effect a course in both types of reading has. Teachers who have had a course in the reading of adolescents, as well as in the classics, scored a median grade of 85 on a test covering both types of reading, while teachers with a background of superior adult literature scored 53 on the test.

Education During Air Raids

Education flourishes in air raid shelters in London, it was reported recently. Approximately 350 classes have been established in basements and air raid shelters in east and central London. Lecture work is carried out in some places by the ministers and members of a Methodist congregation. Instruction in mechanics and mathematics is popular and reading is generally on the increase. Libraries are now in existence in the large shelters and many of the older people are engaged in study of postwar planning and the backgrounds of the present war.

Another apparently successful experiment that has been undertaken in England is the operation of about 40 educational camps for elementary school children. These camps accommodate approximately 250 children each and are situated well away from the crowded cities. Each camp has its own assembly rooms, dining halls, classrooms, dormitories, hospitals and central heating system. The cost of maintaining a child at camp is $5.20 per week; parents are asked to pay approximately one fifth of this amount.

Curriculum Units Published

A series of curriculum units for use in elementary and secondary schools is being published by the curriculum laboratory of the University of Oregon. Each unit contains an overview, suggested approaches, research activities, references, evaluation technics, correlations and other teaching aids. They may be obtained from the University Cooperative Store, Eugene, Ore.

Some of the most recent bulletins in the series include: "Bread," a second grade unit; "Pets," a first grade unit; "Local and Pioneer History," a fourth grade unit, and "Interdependence of Plant and Animal Life," a high school science unit.

SAFETY

Pedestrian Protection Contest

In an effort to reduce pedestrian fatalities and injuries the American Automobile Association has announced the 1941 "Pedestrian Protection Contest." Based on reports submitted at the end of the year, 24 bronze plaques will be awarded to states and cities that carry out the most effective pedestrian programs and have the best records for the year.

To be eligible for awards, entries in the 1941 contest must be postmarked not later than September 30. An annual report of activities for 1941 must be submitted on forms furnished by the American Automobile Association and must be mailed by March 15, 1942.

In the 1940 contest state winners were, first, Oklahoma, with Oregon and Utah

Every vocational training instructor will find the new Lyon Catalog invaluable in solving problems created by today's emphasis on practical shop training. The wide variety of industry-approved products it shows have proved their value both in classrooms and in America's leading industrial plants. Included among many new items especially designed to meet defense program training needs are the efficiency-promoting, space saving Drawing Table, Arc Welding Bench, Gas Welding Bench, Woodworking Bench and Sheet Metal Working Bench illustrated in panel at right.

A copy of this book will be sent to vocational school instructors without expense or obligation. Mail coupon today for your copy.

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Detroit Public Library

One of three Bradley Washfountains in the washroom adjoining the shop in the McClymonds High School, Oakland, Calif.

For Health's Sake Give Your Students Modern Wash Fixtures

Clean, sanitary washing fixtures are a necessary part of every school and modern Bradley Washfountains have replaced the conventional single-person wash basins because they provide the ultimate in sanitation, save space, require 90 per cent fewer piping connections, and cut water consumption 70 per cent. They serve 8 to 10 simultaneously, with clean running water from a central sprayhead.

Bradley Washroom Consultants will gladly make washroom layout recommendations. BRADLEY WASHFOUNTAIN CO., 2207 W. Michigan Street, Milwaukee, Wisconsin.

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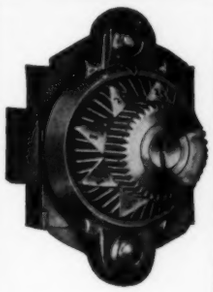

S-642 Square Dead Bolt, Master-keyed Combination Lock.

A unique reset key, exclusive with Dudley makes possible *instant* combination changes without removing any part of the lock from the door. This patented feature means a remarkable saving in administrative time and work. Fits standard piercings, no extra holes to drill.

Administrative control is further simplified by a single masterkey, which in a complete Dudley masterkeyed system, will open every lock or any combination of groups.

Write today for catalog showing the complete line of Dudley locks from padlocks to built-in locks, with or without masterkey.

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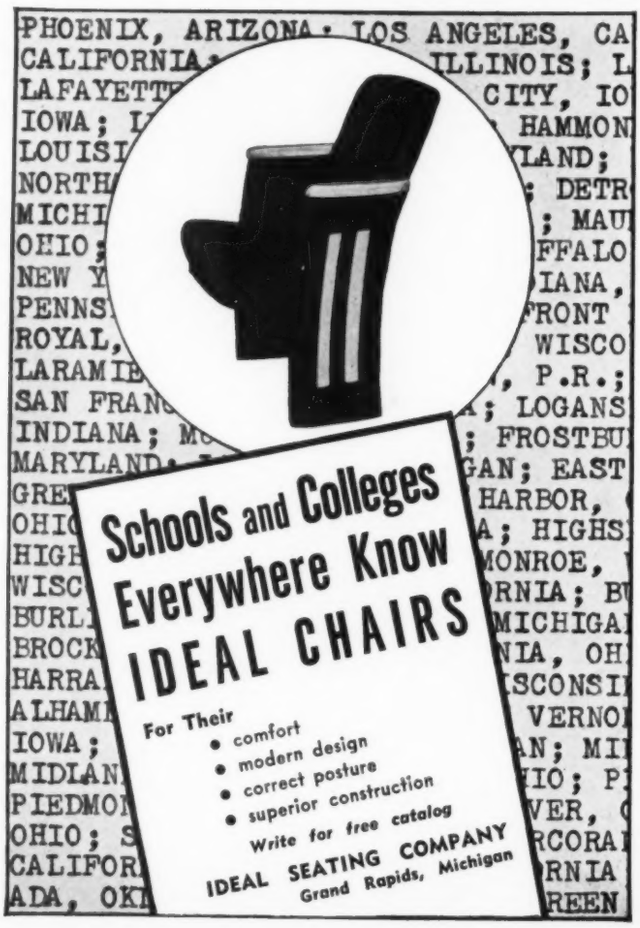

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tied for second place. The cities that won first place, according to their population groups, were as follows: 500,000 or more population, Cleveland; 100,000 to 500,000, Kansas City, Mo.; 50,000 to 100,000, Oak Park, Ill.; 10,000 to 50,000, Aberdeen, S. D.; under 10,000, Grand Haven, Mich.

PUBLICATIONS

Adult Education Increases

Adult education has made progress in the public schools of Brockton, Mass., according to the attractive annual report issued by John L. Miller, superintendent of Brockton schools for 1940. A machine shop course for defense training, which has been in operation since July 1940, has been responsible for placing more than 40 men. The activities of the schools are analyzed in detail and liberally illustrated.

New York Enrollment Drops

Enrollment in New York City schools will drop below the 1,000,000 mark next year for the first time since 1927, according to the statistical report recently submitted by Dr. Harold G. Campbell, superintendent. The net loss in enrollment during the last decade has been 50,000 pupils. Elementary grades have decreased by 200,000. Until a year ago the junior and senior high school divisions increased in size sufficiently to offset this loss, but that situation no longer obtains. In contrast to these divisions, the vocational schools have shown an increase in registration of from 6194 to 52,644 during the last ten years, Doctor Campbell reported.

Economic Education Promoted

Ten educational institutions from Florida to Colorado received funds from the Alfred P. Sloan Foundation, New York City, during 1940 to aid in developing patterns of economic education designed to teach different elements in the population how to improve their living conditions, according to the 1940 report of the foundation. School lessons in providing proper food, clothing and shelter constitute the pattern devised for low income groups; in addition, the fund sponsored six patterns of economics teaching for higher income groups.

Labor Problems Summarized

Antistrike laws may increase rather than curtail the number of strikes in defense industries, it is pointed out in the pamphlet, "Labor in the Defense Crisis," recently published by the Public Affairs Committee, 30 Rockefeller Plaza, New York City. The pamphlet, the fifty-eighth in the series of popular factual pamphlets published by the committee, summarizes a survey of the defense labor problem made by a committee of the Twentieth Century Fund.

Pupils Study Leisure Activities

An investigation of community recreational facilities was recently completed by seventh grade pupils of the Bond Hill School in Cincinnati.

In evaluating the results of their survey, the pupils concluded that most of their leisure activities are carried on outside the home; that radio drama has the widest listener appeal, with news broadcasts a close second; that the largest item of expense in recreation is the movies, and that the survey had helped the members of the class to develop new interests.

ANNIVERSARIES

Fiftieth Anniversary Celebrated

The fiftieth anniversary of its founding was celebrated recently by Central Washington College of Education at Ellensburg, Wash. The fiftieth commencement address was delivered by Dean Harry S. Ganders of Syracuse University, an alumnus of the college.

Without sacrifice of a single property

Sunfilled pure concentrated

ORANGE and GRAPEFRUIT JUICES

meet an economic demand

In these widely endorsed products the flavor, bouquet, vitamin C content and other nutritive elements of the freshly squeezed juices are successfully retained. To convert into ready-to-serve form you simply add water. Year 'round uniformity, so important in dietetics, is assured through our unique methods of concentrating and blending.

No complaints from patients are likely if this year 'round, uniform product replaces the juice from underripe or overripe fruit such as is frequently found on the market.

Controlled blending is the crux of uniformity. Ripe fruit and low-sugar fruit are mixed at low temperatures under high vacuum to give a resulting juice constancy approximating 12 parts of natural fruit sugar to 1 part of natural fruit acid. This assures a delicious natural flavor and taste . . . throughout the twelve months of the year.

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CHECK THESE SAVINGS . . .

- **Conserves the budget dollar**
- **Avoids time-consuming inspection, cutting and reaming of fruit**
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WAR ON WASTE

It's not so much a question of tanks and bombs for the citizens of a nation girding for defense. It's the vital question of warring on waste—of common-sense conservation. Boston Pencil Sharpeners lead the war on schoolroom waste because they save time, they operate at top efficiency always, they save pencils and points. Wise school administrators designate Bostons.

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BOSTON SF-4
sharpens any size pencils, quickly, correctly, without waste! Larger chip receptacle, the famous exclusive Boston feature—15 cutting edges—add 25% to the life of the sharpener.

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Norton Door Closer Company is a pioneer in the design and manufacture of door control devices, having more than 60 years continuous experience in this specialized field. There is a Norton Door Closer for all types of doors. For operating efficiency and maintenance economy, select Norton Door Closers for both new installations and replacements.

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ONE PIECE STEEL CONSTRUCTION

Of course, you want the new, fan-shaped backboard—the one and only backboard recognized as "Official" by the National Basketball Committee of the United States and Canada. The Medart Backboard is fabricated of one piece of steel, strongly braced and priced within the reach of all. Be ready for the new season. Replace you old equipment without delay.

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Ask for a sample of GUMMI. Try it and see for yourself what a perfect school paste it is. Smooth, clean, spreads easily, dries quickly—and what GUMMI sticks, stays stuck! Freezing does not damage GUMMI—an important factor during winter months.

Write today for a sample of GUMMI!

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HEALTH

Eye Health Education Needed

A detailed study of 17,500 physical examinations of New York City draftees revealed that more than 5 per cent of the men called for military service have been rejected for defective vision, it was stated by Dr. Arno Town, examining ophthalmologist of the New York City draft board, at a meeting of the National Society for the Prevention of Blindness. Doctor Town pointed out that many of these eye defects can be remedied and advocated an intensified program of vision conservation that will include eye health education in the schools, in industry and in adult groups of the general public.

N.Y.A. Health Program

Medical examinations of 10,000 young people employed on the National Youth Administration out-of-school work program in 21 states revealed that nine out of every 10 are suffering from health defects, most of which can be remedied by proper care. More than half of those examined, 56 per cent, were in need of dental care. Refraction of the eyes was recommended for 15 per cent and another 15 per cent needed to have tonsils removed. The examinations were made as part of the nation-wide health program of the N.Y.A., which is designed to build up the health and physical fitness of the youth workers.

COURT DECISIONS

Support for Religious School

The supreme court of Missouri unanimously ruled on July 25 that public funds cannot be used to support religious schools. The case arose in the predominantly Roman Catholic town of Meta and affected St. Cecelia School, a parochial institution that had been incorporated into the public school system ten years ago. While state prescribed texts were used and state course requirements met, nuns were retained as school teachers and the parish priest taught the Roman Catholic religion as a part of the curriculum.

Non-Catholic parents of several different faiths brought the suit in protest at being forced to pay taxes in support of a religious school. A smaller public school had also been supported by the school district for non-Catholic children, but the decision intimated that circumstances at times forced non-Catholic pupils to attend St. Cecelia School.

It was the first time the Missouri supreme court had been called to rule upon such a question in the 120 year history of the state. The opinion, written by Judge James M. Douglas, stated: "The constitutional policy of our state has decreed the absolute separation of church and state, not only in governmental matters but in educational ones.

"Public money, coming from taxpayers of every denomination, may not be used for the help of any religious sect in education or otherwise.

"The inclusion of St. Cecelia School in the public school system and its maintenance as a part of and as an adjunct to the parish church in its religious teachers, and where children of every faith may be compelled to attend and have attended, constitutes a denial of our guaranty of religious freedom.

"If the management of this school were approved, we might next have some other church gaining control of a school board and have its pastor and teachers introduced to teach its sectarian religion.

"Our schools would soon become the centers of local political battles which would be dangerous to the peace of society in which there must be equal religious rights to all.

"The faithful observance of our constitutional provisions happily makes such a condition impossible."

YOUR SCHOOL WILL USE A NEW KIND OF RECORDING DISC THIS YEAR!

The aluminum base recording blanks you have used in the past will not be available this year because the entire aluminum supply is being used for national defense.

Here is the information you need to order the new Presto recording blanks and needles for your speech and music departments.

PRESTO GLASS BASE DISC: The highest quality disc now made, smoother, more rigid than the metal base discs, acknowledged by recording engineers to be the finest disc ever developed for sound recording. Recommended for all of your important recording, particularly transcriptions to be broadcast by radio stations. Overall thickness (.104"). Made in the following sizes:—

TYPE	SIZE	LIST PRICE
912-A	12"	$1.25
913-A	13½"	1.50
916-A	16"	2.50

NOTE:—The 12" and 13½" discs are packed 20 to a case, the 16" 15 to a case.

PRESTO STEEL BASE DISC: A new disc equal in quality to the Presto Orange Seal disc which was widely used for educational recordings. Gives excellent reproduction of both speech and music. Overall thickness (.036"). Made in the following sizes:—

TYPE	SIZE	LIST PRICE) (Box of 10
307-A	7"	$4.50
308-A	8"	5.50
310-A	10"	8.00
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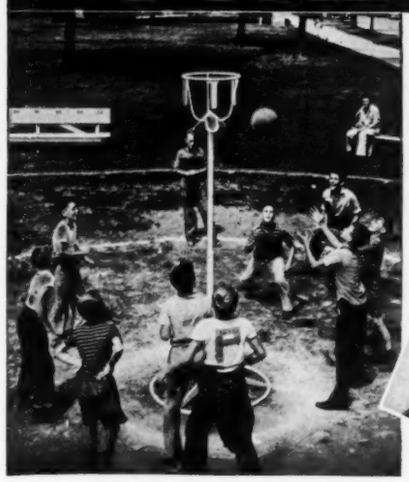

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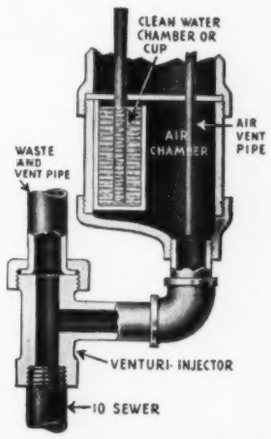

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NAMES IN NEWS

Superintendents

G. E. DILLE, former superintendent of schools, Maplewood, Mo., has been appointed superintendent of public schools at Peoria, Ill. E. R. ADAMS succeeds Mr. Dille at Maplewood.

PAUL L. ESSERT, head of the Denver Opportunity School and director of vocational education, Denver public schools, will succeed DR. E. R. VAN KLEECK as superintendent of schools at Grosse Pointe, Mich.

W. T. ROWLAND JR., assistant superintendent of schools, Louisville, Ky., since 1934, has been named head of the school system of Lexington, Ky.

A. J. HARGROVE, superintendent of Dublin city schools, Dublin, Ga., has resigned to accept a position with the state department of education.

FRANK C. BERRY, who has been principal of Milford High School, Milford, Mass., was recently elected superintendent of schools at Milford.

GEORGE A. SELLIG has been appointed superintendent of schools for the Webster-Dudley School Union, Webster, Mass.

A. B. WETHERINGTON has resigned the post of superintendent of schools at Blevins, Ark., which he has held for the last six years, to accept the superintendency of schools at Malvern, Ark.

HARVEY T. DARST, for the last two years superintendent of the Jackson Township Schools, Darke County, Ohio, is the new superintendent of the Kingston Union School District, Kingston, Ohio.

M. E. THOMPSON, assistant state school superintendent of Georgia public schools, has resigned to accept a position as representative of a textbook firm.

LEON COUCH, principal of Grantham High School, Wayne County, North Carolina, was elected supervising principal of the school system of Roxboro, N. C. The former incumbent, H. C. GADDY, resigned at the close of the school year.

HAROLD F. KING has been appointed superintendent of schools of Coventry, R. I., to succeed RICHARD E. E. CAMPBELL. Mr. King was formerly principal of the Coventry High School.

DR. JEROME O. CROSS, for the last twenty years superintendent of schools, Santa Rosa, Calif., retired at the end of the school term.

ANDREW J. BURDICK has been named superintendent of schools at Utica, N. Y. He has served as principal of the Utica Free Academy since 1938.

LORING A. ADDITION, principal of Ellsworth High School, Ellsworth, Me., submitted his resignation at the close of the school year in order to accept the superintendency of the Calais-Woodland Union, Calais, Me. He succeeds ALDEN ALLEN, who has accepted a similar position at Rockland, Me.

JAMES D. SPROUL has been elected district school superintendent of Cattaraugus County, New York.

HAROLD J. EVANS, superintendent of schools, Rathdrum, Ida., has succeeded M. E. HAWK as principal of the junior high school at Coeur D'Alene, Ida.

DENVER D. KIRKLAND of Coalgate, Okla., was recently elected superintendent of schools at McAlester, Okla., for the 1941-42 term.

HARRY W. BOWLES, principal of Washington School, Washington, Iowa, succeeded H. O. BROUGH as superintendent of the high school and grade school, Lancaster, Mo., on August 1.

DONALD R. BAKER, superintendent of Bazetta School, Bazetta, Ohio, has accepted a similar position at Lordstown, Ohio, for 1941-42. At the same time, other changes were announced by district boards of education of Trumbull County: J. H. WANAMAKER has been named head of the schools of Vienna, Ohio, to replace C. DANA LAMB, and E. GORDON BOSTER succeeds Mr. Baker at the Bazetta School.

THOMAS C. PRINCE, general schools supervisor for Jacksonville, Fla., and Duval County, was unanimously elected

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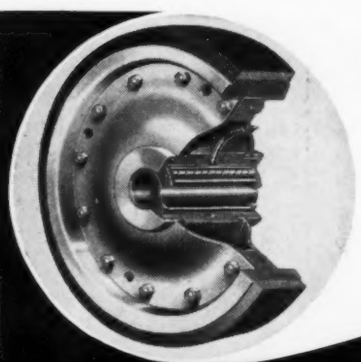

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superintendent of schools of Knoxville, Tenn. DR. HARRY CLARK, the former head of the school system, submitted his resignation to take effect on July 1.

TERRENCE A. DUFFY, teacher at Audubon Junior High School, Los Angeles, will succeed PATRICK J. NORTON as acting superintendent of Whittier State School for Boys, Whittier, Calif.

County Superintendents

A. J. CAMDEN has been appointed superintendent of schools for Amherst County, Virginia, for a four year term. He succeeds W. D. Cox.

W. M. FLOYD, superintendent of the Ada exempted village school district, Ohio, has been employed as superintendent of the public school system of Allen County, Ohio.

MRS. MILDRED P. BLEDSOE was recently elected superintendent of schools, Texas County, Oklahoma. She succeeds HELEN M. PIERCE.

Principals

HENRY C. WAGNER has been named principal at West Junior High School, Warren, Ohio, to succeed HARRIET FLETCHER, who resigned recently.

DONALD P. SUTHERLAND, school principal at Nassau, N. Y., has become director of elementary education at East Greenbush Central School, East Greenbush, N. Y.

ELMER A. KNOWLES retired at the close of the school year as principal of South Junior High School, Niagara Falls, N. Y. L. R. WITT has been named to succeed Mr. Knowles.

JOHN W. MCTERNAN has been appointed principal of Winthrop School in New London, Conn., to fill the vacancy created by the resignation of ANNIE M. CROFTON.

EDWARD MORGAN, dean of boys at Oakdale Union High School, Oakdale, Calif., has accepted the position of principal of Williams Union High School District, Williams, Calif.

C. L. SCOTT, for the last fourteen years principal of Branciforte Junior High School, Santa Cruz, Calif., retired at the close of the school year.

T. GILBERT MCFADDEN, principal of the Dickinson Accredited Evening High School and the Dickinson Evening Technical and Industrial High School, Jersey City, N. J., has resigned after thirty-five years of service.

R. W. GUILFORD has resigned his post as principal of Durham Union High School, Durham, Calif., to accept a similar position at the high school at Gridley, Calif.

CHARLES D. TINLEY, principal of Dunkirk Industrial High School, Dunkirk, N. Y., has been ordered into the Army. Mr. Tinley holds the rank of captain in the reserve.

DONALD A. TRAYSER, principal of the Brasher and Stockholm High School, Winthrop, N. Y., resigned at the close of the school term.

MOSES C. LOWRY has been appointed temporary head of Wharton High School, Dover, N. J., to fill the vacancy created by the resignation of G. EDWARD HOLLOWAY, who has been called up for Army service.

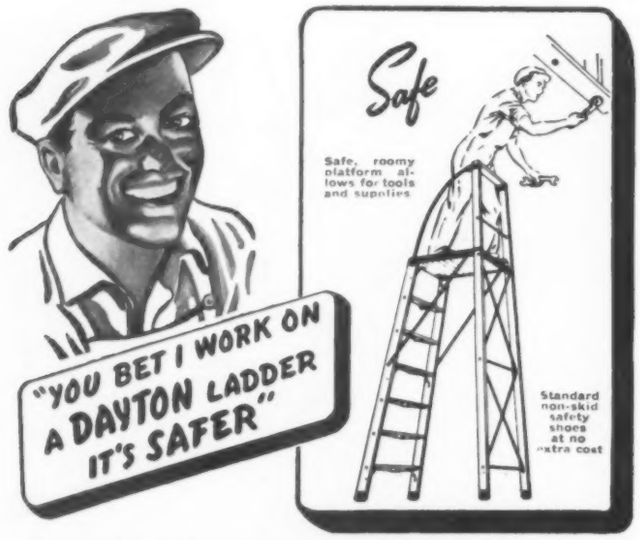
LYDIA GUERNSEY, for fifteen years assistant headmistress of Oxford School, Hartford, Conn., retired at the close of the school year.

WILSON F. GONCE, principal of Bridgeport School, Bridgeport, Ala., tendered his resignation from that position to become superintendent of schools in Greenville, Ala.

J. CLIFFORD GEER, principal of the high school of Danielson, Conn., has been appointed principal of the Concord High School, Concord, Mass. He succeeds WILLIS B. GIFFORD, who resigned recently.

HAL D. CRANE, for the last two years vice principal at Central Junior High School, Riverside, Calif., will assume the principalship next term. He replaces FRANK P. TAYLOR, who retired recently.

CHARLES E. MILEY JR. has been se-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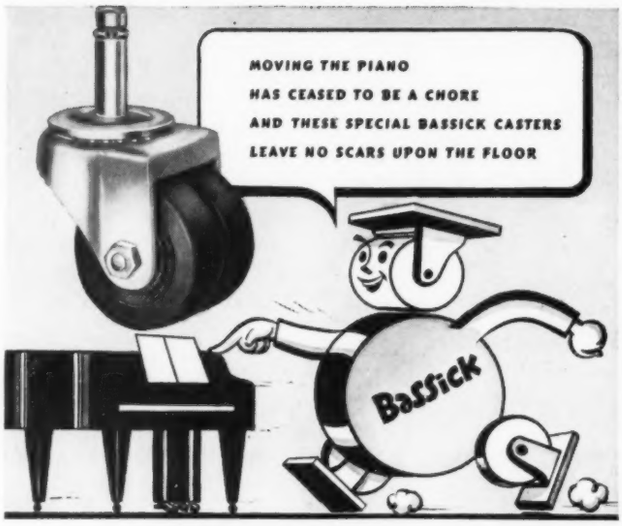

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lected as principal of the Boyce Agricultural High School, Boyce, W. Va., for the 1941-42 term.

TOBIAS J. COLLINS, principal of Tivoli High School, Red Hook, N. J., has resigned to accept the position of principal of Oriskany Central School, Oriskany, N. Y.

CHARLES PRICE has been appointed supervising principal of McVeytown-Oliver joint schools, McVeytown, Pa., succeeding DAVID SWARTZ, who resigned to accept the supervising principalship of Derry Township schools, Derry, Pa.

CREED F. BATES, principal of Chattanooga High School, Chattanooga, Tenn., has been called into military service as captain in the field artillery.

HAROLD A. RENWICK, principal of Seaton High School, Seaton, Ill., has been engaged as principal of Atkinson Community High School, Atkinson, Ill., for the new year.

LAWRENCE E. VREDEVOE, principal of Tappan Junior High School, Ann Arbor, Mich., has been named successor to PAUL A. REHMUS as principal of Lakewood High School, Lakewood, Ohio.

ERNEST F. FORBES of Peterborough, N. H., has been named principal of Killingly High School, Killingly, Conn.

HERBERT W. DEVEBER has been elected principal of the Corinna Union Academy, Corinna, Me.

Private Schools

MEREDITH B. WOOD, a faculty member of St. Paul's School, Concord, N. H., has been named headmaster of Hoosac School, Hoosick, N. Y.

CHARLES HODGE JONES, Oxford, Pa., has been named headmaster of Columbus Academy, Columbus, Ohio, succeeding FRANK P. R. VAN SYCKEL.

HENRY F. WERNER, for the last fifteen years associated with the Newman School, Lakewood, N. J., will become headmaster of the new Notre Dame School for Boys, Cincinnati.

In the Colleges

DR. ARVIN N. DONNER, former principal of Port Arthur High School, Port Arthur, Tex., has been made head of the school of education at the University of Houston.

DR. RALPH K. HICKOK, president of Western College, Oxford, Ohio, has resigned because of ill health. His resignation will be effective Feb. 1, 1942.

DR. ALBERT MARTIN GATES, president of Brewton-Parker Junior College, Mount Vernon, Ga., has been named to succeed DR. MARVIN PITTMAN as president of Georgia Teachers' College, Statesboro.

DR. EDWIN PUSEY has been named acting dean of the college of education, University of Georgia, succeeding DR. WALTER D. COCKING.

GEORGE NEYMAN PORTER, retired principal of Garfield High School, Seattle, Wash., has been appointed dean of the new Everett Junior College, Seattle, which opens September 8.

Deaths

CHARLES EDWARD ROUDABUSH, superintendent of schools, Minersville, Pa., died recently after a stroke of apoplexy.

DR. WILLIAM H. MCILHATTAN, superintendent of schools, Greensburg, Pa., died of a heart attack July 20.

JAMES ARTHUR LEITZE, principal of Murrayville High School, Murrayville, Ill., for seventeen years, died recently.

J. HOWARD LONGACRE, assistant principal of West Philadelphia High School, Philadelphia, since its opening in 1912, died recently following an operation.

ABBIE C. WAGER, assistant superintendent of Montgomery County schools, Pennsylvania, since 1926, died recently of a heart attack.

C. WAYNE WAITE, supervising principal of schools, Allensville, Pa., died July 3 in the J. C. Blair Memorial Hospital, Huntington, Pa.

SYLVESTER GREER, principal of Bradford Junior High School, Dixiana, Ala., died recently following a brief illness.

B. JOSEPH GURBARG, principal of Robert Fulton School, Germantown, Pa., was drowned recently.

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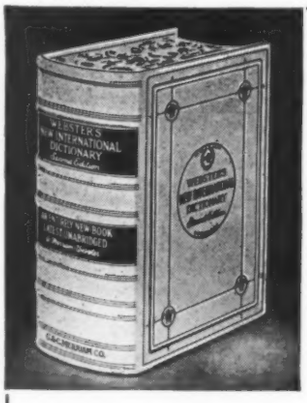

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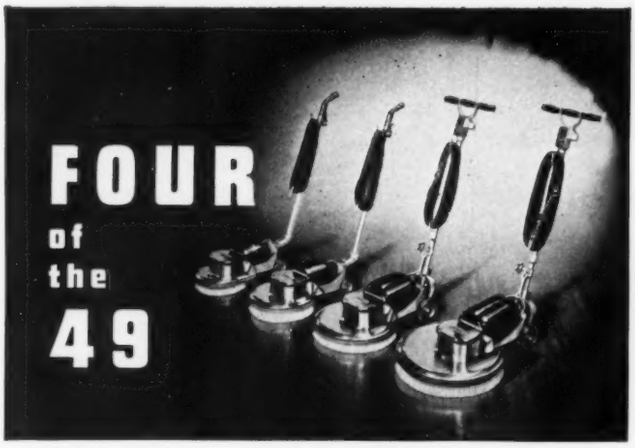

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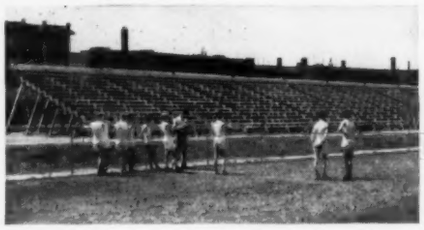

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General

AN EVALUATION OF THE UNIT-DIRECTED STUDY PROCEDURE. *By Robert S. Ellwood. Normal, Ill.: Illinois State Normal University Bulletin. Pp* 50. *(Paper Cover.)*

HOW SHALL WE PAY FOR DEFENSE? *By Maxwell S. Stewart. New York: Public Affairs Committee, Inc.,* 1941. *Pp.* 30. $0.10 *(Paper Cover).*

PROBLEMS IN FINANCING THE COMMON SCHOOLS OF OKLAHOMA. *By John F. Bender and Others. Norman, Okla.: Oklahoma Education Association,* 1941. *Pp.* 247.

THORNDIKE CENTURY SENIOR DICTIONARY. *By E. L. Thorndike. Chicago: Scott, Foresman and Company,* 1941. *Pp.* xxxviii+1065. $2.48.

THE ADOLESCENT PERSONALITY. *A Study of Individual Behavior. Prepared for the Commission on Secondary School Curriculum. By Peter Blos. New York: D. Appleton-Century Company,* 1941. *Pp.* xiii+517. $3.

THE RIGHT JOB FOR YOU. *And How to Get It. By Esther Eberstadt Brooke. New York: Noble and Noble, Publishers, Inc.,* 1941. *Pp.* xvii+304. $1.90.

RADIO AND THE CLASSROOM. *Published by the Department of Elementary School Principals. Washington, D. C.: National Education Association,* 1940-41. *Pp.* 97. $0.75. *(Paper Cover.)*

SOCIAL DISORGANIZATION. *Revised Edition. By Mabel A. Elliott and Francis E. Merrill. New York: Harper & Brothers, Publishers,* 1941. *Pp.* xv+1087. $3.75.

ADMINISTERING VOCATIONAL EDUCATION. *By Walter H. Magill. Minneapolis: Educational Publishers, Inc.,* 1941. *Pp.* xii+118. $1.60.

FAMILY LIVING AND OUR SCHOOLS. *Prepared by Joint Committee on Curriculum Aspects of Education for Home and Family Living, National Education Association. New York: D. Appleton-Century Company,* 1941. *Pp.* xiii+468. $2.50.

WHAT IT TAKES TO MAKE GOOD IN COLLEGE. *By Samuel L. Hamilton. New York: Public Affairs Committee, Inc.,* 1941. *Pp.* 32. $0.10. *(Paper Cover.)*

THAT MEN MAY UNDERSTAND. *By Harold Rugg. New York: Doubleday, Doran and Co., Inc.,* 1941. *Pp.* xvii+355. $2.75.

EDUCATION IN THE TERRITORIES AND OUTLYING POSSESSIONS OF THE UNITED STATES. *By Charles F. Reid. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. *Pp.* xxv+593. $3.85.

ARITHMETIC IN GENERAL EDUCATION. *Sixteenth Yearbook, National Council of Teachers of Mathematics. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. *Pp.* xii+335. $1.25.

Textual

NUMBER PLAY: *A Number Readiness Book. By Mae Knight Clark and Laura Cushman. New York: The Macmillan Company,* 1941. *Pp.* 80. $0.32 *(Paper Cover).*

KNOWING YOUR LANGUAGE. *Pp.* xiii+338. $1.12. STRENGTH THROUGH ENGLISH. *Pp.* xiii+365. $1. *By Frederick H. Bair, Elma A. Neal and Vernon T. Sanders. New York: The Macmillan Company,* 1941.

WORKING FOR DEMOCRACY. *By Lyman Bryson and Kerry Smith. Pp.* xvi+425. $1.32. THE GROWTH OF DEMOCRACY. *By Edna McGuire and Don C. Rogers. Pp.* xvi+428. $1.32. *New York: The Macmillan Company,* 1941.

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Ten Business Leaders Give Views on Impending Scarcities

L. E. PARMENTER

National School Supplies and Equipment Association

To ensure continued operation of school systems on an efficient and productive basis, school administrators and executives should help the industries that produce the necessary supplies and equipment to procure the raw materials with which to supply the needs.

To do this, *the school executive should certify with each order for school materials that they are for use in his school system.*

If and when a priority rating is given to schools, the school official should religiously give a priority certificate with each and every order to ensure a continuing supply of materials for future needs.

It is only through the strictest cooperation between the schools and their suppliers that a program of production of school materials can be maintained and the schools prevented from a terrible dislocation because of the lack of adequate working materials.

Let me urge everyone to begin doing this immediately because we are almost "too late" now.

H. M. TALIAFERRO

President, American Seating Company

We view it as essential that school needs be given priority rating, not only for the maintenance of schools in the usual operation of education, but to meet a more serious matter in the case of educational facilities that must be provided for the congested defense centers into which a heavy migration of school population is moving and will continue to move. Belated provision has been made for facilities for these schools (the so-called Lanham Bill), but a critical situation will develop in a few weeks when the school season opens in these areas, and proper facilities will not be available unless immediate steps are taken.

The critical materials at the present time in the manufacture of school desks appear to be iron and steel. Without these two materials no satisfactory modern school furniture can be produced. The research department of our company has given thorough study to the matter of substitution of materials to lessen the quantity of critical items. This program will be continued; however, all interested persons should exert every reasonable influence to obtain a satisfactory priority rating on steel and iron, as well as on other critical materials used in the production of school equipment.

It is hoped that the efforts of your publication will arouse school administrators to the seriousness of the situation. Present inventories will soon be exhausted and, without priority, cannot be restored.

J. L. BRENN

President, Huntington Laboratories, Inc.

The business of manufacturing disinfectants, germicides and floor maintenance materials is rapidly becoming more difficult owing to rising prices of the raw materials that are available and to a serious shortage of those items that are vital in military goods. In the latter category come formaldehyde, chlorine, phenol, cresol, cresylic acids and synthetic phenolic resins, all of which are now either wholly impossible to obtain for civilian use or so strictly rationed that only a small proportion of a firm's normal requirements is obtainable.

The seriousness of this situation has not been brought home to the school administrator yet, because these scarcities did not start to develop until very recently or until after most schools had already bought or contracted for their supplies for the coming school year, and manufacturers, generally, have been able to take care of them out of accumulated stocks. The future, however, looks exceedingly dark unless some sort of high priority is established for school supplies. Higher and constantly increasing prices next year are definitely certain.

J. O. BENGSTON

Secretary, Chicago Apparatus Company

We distribute laboratory supplies, both those that are manufactured in our own plant and those made by other manufacturers; approximately 90 per cent of our total sales are to the educational laboratory.

It is my understanding that no provision is being made as yet for priorities for laboratory supplies for consumption in educational laboratories. It is unnecessary to point out the essential nature to defense of the scientific training given in the educational laboratories, and up to the present time we, as well as other laboratory supply dealers, have been able to meet most of the demands made upon us by these laboratories. Now we are approaching a stage of depletion of our accumulated stocks of merchandise and we have been given every indication that it will be impossible to replenish either our stocks of finished merchandise or raw materials for manufacture without priorities.

Already we are being restricted seriously in our purchase of certain materials for resale and within the next several months it will be necessary that we advise our educational customers that such materials are no longer on the market insofar as they are concerned.

Likewise, the raw materials, such as brass and die castings, used in our manufacturing to make weights, burners, balances and other essential items for the laboratory, are no longer available to us without priorities and our stocks of these items have been practically exhausted.

R. E. WEINZETTEL

Fred Medart Manufacturing Co.

YOUR ATTENTION, PLEASE

The National Emergency that confronts our country has imposed certain necessary restrictions on almost every manufacturer. We are no exception. As of the date of the attached acknowledgment of your valued order, we find it impossible or extremely difficult to obtain certain materials, finishes, etc., normally used by us, many of which have already been placed on the "critical" list by our government. For example, zinc, cadmium, nickel, brass, aluminum, alloy steels, certain enamels—to name but a few—are among this group. Consequently, we are forced to alter certain of our standard specifications and to substitute materials, finishes, etc., that, for all practical purposes, will serve the same purpose. If any part of your valued order differs from our normal specifications, it will be for the reason outlined above. . . . No substitution of either material or finish will be made unless it first satisfies our own high standard, and then only if it is impossible for us to obtain the material or finish being replaced.

Fred Medart Manufacturing Co.

The foregoing notice, which is attached to our acknowledgments of orders to customers, is significant.

At the moment we are in what might well be called the "forced substitution" period. The next state, which we believe

is not far distant, will find many manufacturers forced to withdraw from the market because of inability to obtain necessary materials, unless authorities in Washington can be made to recognize the essential position of schools, properly equipped, in times of stress as well as in times of peace.

The recent ruling of the federal government that steel be made available only for defense projects, plus the refusal of raw material manufacturers to supply various other required materials for other than individual production jobs that have been issued a government priority rating or preference certificate, is pyramiding a fast-growing obstacle to fabricators of school equipment that is not far distant from effecting a complete termination of production.

R. C. McNAMARA

Vice President, Scott, Foresman and Company

Postponed shipments of raw materials, such as paper, cloth and binding board, are already beginning to enter into the picture in the school book field. Delays resulting from this factor and bottlenecks in the manufacturing process are felt in procuring the completed product to fill orders.

Prophecy is futile, even absurd at this time, but it is obvious that wisdom and patience must be added to the unceasing effort on the part of school officials, as well as publishers and supply manufacturers, in order to keep the school "machine" functioning with the greatest possible efficiency.

JOHN E. DeMEYER

President, Crayon, Water Color and Craft Institute

A recent conference with O.P.M. officials in Washington brought out the fact that they consider education an essential function of our government; also, that the supplies necessary to carry on school work are essential. They expressed a willingness to cooperate with manufacturers and school officials but they need facts upon which to base their judgments.

School officials and manufacturers of school supplies must awaken to the fact that cooperation with the government officials is necessary if our schools are to function properly. The best information we can obtain would indicate that there is no immediate danger of a shortage of raw materials in the crayon and water color industry. But it is probable that manufacturers will find it necessary to reduce the number of items in their lines by eliminating duplicate packaging. The contents of our packages are essential, but the containers are not. We must be prepared to accept substitute, if and when necessary. This means that we must sacrifice variety but, in return, the government will see that the flow of essential school materials is uninterrupted.

FRED ROBERTS

Bell & Howell Company

We submit to those military and production authorities the self-evident contention that Education for Defense *is* defense in the most real sense. The Army has already produced hundreds of exceedingly practical instructive motion pictures of technic and tactics. The U. S. Office of Education is supervising the production of at least 40 films to be released early this fall on training in industry. The U. S. Department of Agriculture is adding to its fine educational film library a new series of government produced films on the rôle of the farmer in the present emergency. If the production of sound projectors is to be choked off, how are these films to be shown?

The large scale expansion of the visual instruction movement in our schools has enabled plant expansion to the point where 16 mm. motion picture projectors have become virtually a mass production item. Plant capacities are ample to serve all educational requirements and the additional government needs besides.

The one thing that hinders speedy delivery now and similarly prevents production of the thousands of other projectors that are certain to be ordered this fall by schools anxious to participate in the important educational motion picture program that our government itself has created is a denial of the relatively small amount of aluminum essential for alloy die castings that serve as the framework of motion picture projectors.

Sound projectors for the Army camp, the school, the church, the hospital are machine guns of culture and every bit as important on the field of ideological struggle as are their counterparts on the field of battle.

T. D. WAKEFIELD

F. W. Wakefield Brass Company

Like many other companies, our delivery situation is steadily becoming worse. This is due to the stringent requirements and delayed deliveries on the part of our suppliers of raw material, such as sheet brass, sheet steel, fixture wire, plating supplies and the many miscellaneous fittings that go into a lighting unit.

Although we are able to take care of all orders we have on hand, the raw material for new orders will not be forthcoming to us in most instances unless a priority extension certificate can be granted to us by our customers. The same equipment used in schools is also used in the offices of defense industries, of the Panama Canal and in the Army and Navy. Complete priority ranging from A-1-A to A-10 is available on equipment destined to these companies and shipments are made on orders of this nature long before they are made on those orders carrying no rating.

Many persons will be interested in the delivery of our Commodore unit mainly because this reflector is made of plastic material which has been publicized in many newspapers as being the substitute of scarce materials. It so happens that the very same raw materials that are used in the manufacture of explosives are used in the early stages in the compounding of the molding powder. For this reason plastics are in reality not a substitute at all but are likely to become just as scarce as any metal.

Unless the school officials are able to obtain at least a defense rating on their purchase requirements, schools are very likely to go without lighting equipment or, at least, will experience unusually long delays in obtaining it.

R. G. HALVORSEN

Hamilton Manufacturing Company

To manufacture laboratory furniture, industrial arts equipment and home economics equipment, we need such commodities as steel of all kinds, wood of all kinds, finishing materials, glue, hardware of bronze, black metal and plastics, locks, plumbing fixtures, lead, tin, cadmium, chromium, nickel, soapstone, welded fiber and many other items, some of which are included on the critical list.

It is our opinion that if the school administrators would present their program to the government officials in Washington, explaining the need for these materials for educational purposes, which are most certainly required indirectly in the defense program, a blanket priority rating could be had to cover these different materials for educational use.

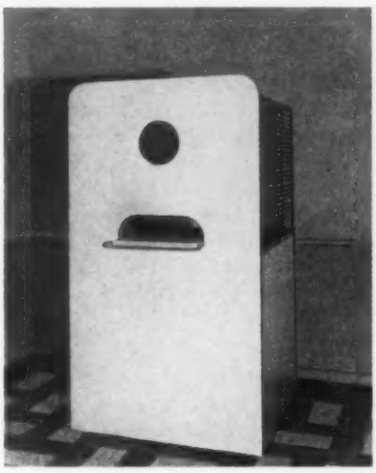
Should you need any additional information from us, we shall be glad to supply it to you or to a committee of administrators.

While our organization to date has had plenty of trouble trying to satisfy our school customers, day by day the conditions grow worse and it is our opinion that unless priority is established it might not be long before the schools will be unable to obtain essential equipment.

Portable Ticket Booth

Wherever tickets are sold for school performances or athletic events, the Universal portable folding ticket booth is right there to help sell them. This booth can be placed just where it is needed when it is needed, and when it is not in use it can be folded and stored away in the original shipping container.

The unit is light in weight but rigid and strong and is said to be easy to



erect and to fold up. The locker unit, which serves both as change shelf and for ticket storage, is equipped with lock and key, making it safe and easy to transport unused tickets and cash to headquarters. The booth is available in pearl gray or green paint, or in light oak, dark oak or green stain.—Universal Bleacher Company, 606 S. Neil St., Champaign, Ill.

• *When inquiring, refer to* **NS218**

Rubber-Base Steel Paint

Rustproof because it is waterproof, the new Paratex rubber-base metal coating recently announced by the Truscon Laboratories is said to be especially adapted to the painting of exposed iron and steel. The paint also protects aluminum, copper and galvanized metal. The chlorinated rubber composition of Paratex makes it extremely resistant to acid, alkali, fumes and chemicals.—Truscon Laboratories, Caniff & Grand Trunk R.R., Detroit, Mich.

• *When inquiring, refer to* **NS219**

Portable Proof Press

School print shops are using the new Lazlo Universal portable proof press with great success, the manufacturer states, because it combines the services of an etching, a litho and a block press. Outstanding qualities of the press are the offset feature; the two interchangeable beds, *i.e.* flatbed and Chase; the resilient hard rubber cylinder, and the elimination of blankets. The offset feature is said to simplify the making of color plates and color blocks.

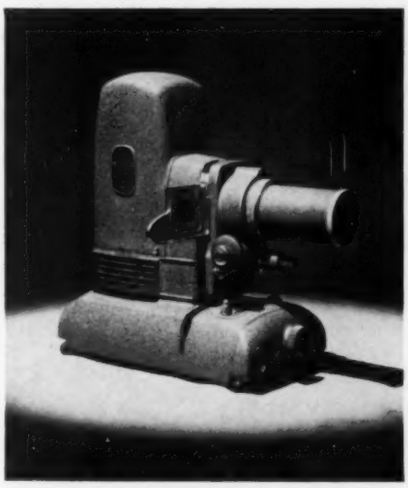
When the press is in operation it is clamped to the corner edge of a table. It is rotated by the starwheel, which has three long spokes for easy handling. A pair of metal frames hold an upper roller, or cylinder, made of hard rubber composition and a steel lower roller. The steel covered traveling bed moves back and forth between the two rollers. —Rembrandt Graphic Arts Co., 18 E. 42nd St., New York, N. Y.

• *When inquiring, refer to* **NS220**

Filmo Slide Projector

Making its debut in the "still" projector field, Bell and Howell Company announces the new Filmo Slide Master for the projection of glass or paper mounted 2 by 2 inch transparencies in either kodachrome or black and white. The unit incorporates a new system of lamp mounting, called the "base-up" lamp, which slides into the lamphouse from the top and burns with its base upward.

Two switches are provided, one releasing current to the entire projector and the other operating only the lamp.



The lamp cannot be turned on unless the fan motor is running so that there is no danger of its overheating. The slide carrier is of the conventional two-slide type that shifts horizontally to permit change of slides while one is being projected. The Slide Master operates on 100 to 125 volts, A.C. or D.C.—Bell and Howell Company, 1801 Larchmont Ave., Chicago, Ill.

• *When inquiring, refer to* **NS221**

Enclosed Fluorescent Light

Existing bare lamp fluorescent light installations can be dressed up quickly and easily in the de luxe glass enclosed equipment recently announced by the Wiremold Company. The new unit is built around the standard Wiremold No. 3000 channel and fittings, with the addition of decorative mullion and end fittings to hold the opal reeded glass enclosures. The equipment is adaptable for use as single units, double units or continuous Line-O-Lamp runs. Hanger and canopy fittings are available for ceiling or suspended installations.—The Wiremold Company, Elmwood, Hartford, Conn.

• *When inquiring, refer to* **NS222**

Insulation Material

A high insulation value is claimed for the U. S. Rubber Company's new cellular rubber, which has the added virtue of being twice as light as cork. The material consists of a thin external dense layer enclosing microscopic cells of nitrogen gas in a matrix of rubber. The insulation value of the material is expressed as .237, which is said to be lower than that of any of the types listed in the U. S. Department of Agriculture handbook for Nov. 2, 1939.

According to the manufacturer, the material is resistant to moisture, oil, acids, fire, vermin and termites; is rotproof, and easy to work with. In addition, unusual structural strength is combined with the lightness of the material. —United States Rubber Company, Rockefeller Center, New York, N. Y.

• *When inquiring, refer to* **NS223**

Floor Material

Stontop flooring can be walked on five hours after it has been applied, custodians will be glad to hear. A dense, durable floor material resistant to acids and greases, Stontop is said to be particularly adaptable for use in kitchens, chemical laboratories and

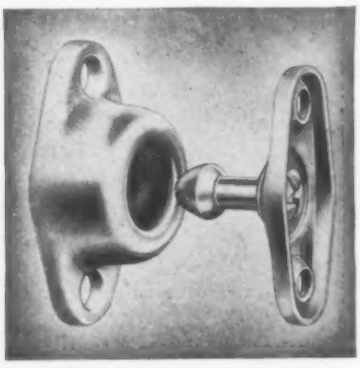
washrooms. It is the same color as concrete and can be applied by the school custodian. No cement, sand or other materials are needed. The material is mixed with water and smoothed on over the existing floor.—STONHARD COMPANY, 401 N. BROAD ST., PHILADELPHIA, PA.

• *When inquiring, refer to* **NS224**

Silent Door Holder

Six points of superiority are claimed for the new silent door holder manufactured by the Bassick Company. These include: simplified construction; quiet; trouble-free operation; durability; economy, and ease of installation.

The holder consists of just two units—a metal plunger and a rubber insert encased in a metal socket. The socket is said to be firm enough to hold the



plunger snugly, yet is pliable enough to permit its release with little effort and absolute quiet. The holder can be obtained with either a bent or straight style of plunger to suit the individual need. Inserts are available with two sizes of openings, which make the holder adaptable for light or heavy doors.—THE BASSICK COMPANY, BRIDGEPORT, CONN.

• *When inquiring, refer to* **NS225**

Steel Wool Lives Longer

The custodian can expect to do a faster and finer job of polishing, wet or dry scrubbing and cleaning on all kinds of floors with the new Finnell steel wool pad, the manufacturer asserts. The welded construction of the pad more than trebles its life expectancy. The pad is designed for immediate use on any fiber brush and is self-adjusting. It can be used with any disk type of machine on wood, composition, rubber, linoleum, cork, masonite, mastic, tile, marble, cement or terrazzo.—FINNELL SYSTEM, INC., ELKHART, IND.

• *When inquiring, refer to* **NS226**

Organ Solovox

In response to numerous popular requests, the Hammond Organ Company announces the addition to its line of

electrical musical instruments of the organ solovox. Originally a piano accessory, the solovox has been adapted to use with the Hammond organ, making the organ a three manual instrument.

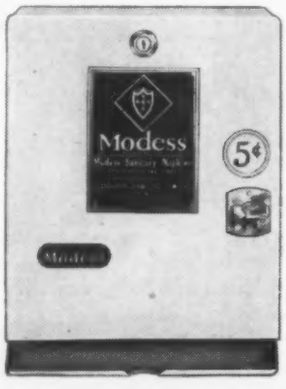
The organ model solovox consists of two parts: a standard three octave solovox keyboard, embodying a range of six octaves and equipped with tilting tablet controls, and a box containing all the mechanism. The model utilizes the organ speaker and controls expression by means of the organ expression-pedal, thus dispensing with the volume control lever that is employed in the regular solovox.

The box can be quickly and easily installed and is hung out of sight under the organ console.—HAMMOND INSTRUMENT COMPANY, 2915 N. WESTERN AVE., CHICAGO.

• *When inquiring, refer to* **NS227**

Compact Vending Unit

A neat, compact sanitary napkin vendor has recently been marketed by Rochester Germicide Company. The newness of the unit lies in its compact size—11 inches wide by 14½ inches high—which enables it to fit into small



spaces in the restroom. It is handsomely finished in baked white enamel and contains from three to four weeks' supply of napkins.—ROCHESTER GERMICIDE COMPANY, ROCHESTER, N. Y.

• *When inquiring, refer to* **NS228**

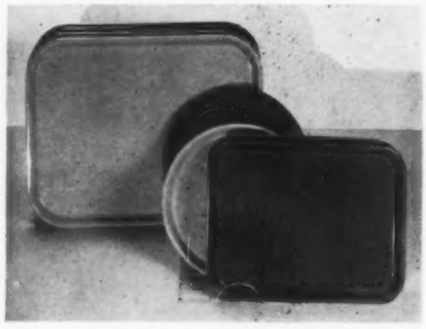
Metal Mender

Economy for home economics classes and food service departments is afforded by the discovery of a new synthetic for mending all metals and metal alloys so that they will withstand boiling water and direct flame. The product is applied without heat or electricity. A drop squeezed on a hole or crack in aluminum, graniteware, stainless steel, iron or porcelain will dry hard overnight, it is claimed. Laboratory tests of repairs made on ordinary aluminum pots and pans withstood 100 hours of boiling at temperatures reaching 2000°F., the manufacturer states.—THE PERFECT MANUFACTURING COMPANY, 3317 MADISON RD., CINCINNATI, OHIO.

• *When inquiring, refer to* **NS229**

Serving Trays

The roughest handling by exuberant youth at mealtime won't make a dent in Kys-Ite serving trays, according to



the Keyes Fibre Company, which developed the product in collaboration with Durez Plastics and Chemicals, Inc., North Tonawanda, N. Y. Made of a unique material and by a new process, the trays are said to have all the desirable qualities of phenolic plastics, such as durability, smoothness and attractive appearance. In addition, they are non-shatterable and extremely serviceable. They can easily be cleaned with a damp cloth. Tests have shown that the impact strength of Kys-Ite is from 5 to 7 times that of general purpose phenolic molding compounds. The trays are available in five standard colors: brown, black, blue, rust and rust maroon. Other shades may be obtained at a slight increase in cost.—KEYES FIBRE COMPANY, WATERVILLE, ME.

• *When inquiring, refer to* **NS230**

Wooden Jungle Gym

One hundred million play hours without a serious accident proves the safety of the J. E. Porter jungle gym climbing device, the manufacturer states. An indoor, hardwood model of the unit has recently been developed that is especially recommended for use in kindergartens, day nurseries and elementary schools. Being portable, the wood model can

also be used outdoors. It is available in two sizes; the smaller accommodates 15 children and the larger, 20 children. The wood is treated with a special oil finish for appearance and durability. Rungs are so spaced that children can climb for long periods without getting more than a few feet off the floor.—J. E. Porter Corporation, Ottawa, Ill.

• *When inquiring, refer to* **NS231**

Fluorescent Prices Down

A reduction of approximately 15 per cent in the price of its line of fluorescent lamps (the fourth reduction in the last seventeen months) has been announced by Hygrade Sylvania Corporation. The four price reductions that have been made since March 1940 have practically cut fluorescent lamp prices in half, it is asserted.—Hygrade Sylvania Corporation, Salem, Mass.

• *When inquiring, refer to* **NS232**

Soybean Binder in Paint

Defense needs for new adhesive materials in housing and industry have brought the soybean to the forefront of the paint picture. The Glidden Company has recently marketed a new water-thinned wall paint that utilizes soybean protein as a binder. The new product, named "Reflect-O-Lite," is supplied in paste form. The paint can be applied over either plaster or wallpaper. It will readily cover any wallpaper that is in basically good condition, the manufacturer asserts. No sizing is required to apply Reflect-O-Lite and it is said to clean easily and to retain its original color over a long period of time. Another advantage claimed is a high degree of light reflection.—The Glidden Company, Cleveland, Ohio.

• *When inquiring, refer to* **NS233**

Electrical Recordings

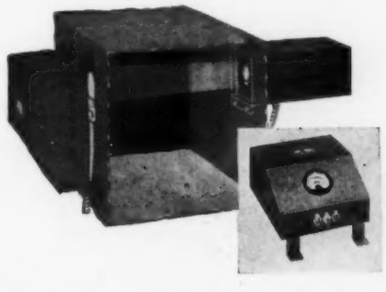
A series of electrical transcriptions on which is recorded educational material for use in assembly programs, classrooms, study groups and public address broadcasts is now available from Recorded Lectures, Inc. The recordings have been prepared by professional talent under the direction of modern educators. The 1941 tentative catalog for junior and senior high schools includes "This Is America," two series of dramatic episodes in American history. "The Living Bible," a series of dramatizations of the Bible, is also scheduled. Records are also available that are suitable for use in elementary schools, universities and colleges.—Recorded Lectures, Inc., 737 N. Michigan Ave., Chicago, Ill.

• *When inquiring, refer to* **NS234**

Smoke Eliminator

An electric eye is now fixed upon the dual problem of smoke elimination and combustion economy. Rehtron Corporation has recently developed two photo-electric indication and elimination control robots that operate on 115 volts, A.C. or D.C. Both units are applicable to any type and size of coal burner, either stoker or hand fired, and to oil-burning equipment as well.

Model SC-301, an illuminated density meter, continuously indicates smoke density in breeching or stack and provides for immediate bell or light signal,



or both, when the smoke exceeds the maximum allowable density. Model SC-302 includes the features of SC-301 plus automatic control of steam or air over the fire, thus increasing the boiler efficiency.—Rehtron Corporation, 2159 Magnolia Ave., Chicago, Ill.

• *When inquiring, refer to* **NS235**

Cleans Hands Gently

Hands that are hard to clean become shining examples of cleanliness with Annite cake, a product that removes stains but leaves the skin intact. Shop pupils, custodians and engineers whose hands become stained and dirty with grease, oil or carbon will find Annite cake a powerful cleansing agent that is soluble in hot or cold, hard or soft water, the manufacturer claims. Furthermore, it causes no tenderness or irritation of the skin.—Quigley Company, Inc., 56 W. 45th St., New York, N. Y.

• *When inquiring, refer to* **NS236**

Steel Supports Desk

Angle iron is supplanted by tubular steel in the construction of the supports of Beckley-Cardy Company's new movable desk. This Super De Luxe model also features new molded edges on the desk top, rounded aisle corners

for easy access to the desk and an arched backrail to give extra support for the pupil's back. The tubular steel support permits the desk top to be easily adjusted over a wide range of heights and does away with the extra side brace that is needed on the older models—Beckley-Cardy Company, 1632 Indiana Ave., Chicago, Ill.

• *When inquiring, refer to* **NS237**

Nelson Buys Autovent

Herman Nelson Corporation purchased the assets and business of the Autovent Fan and Blower Company, Chicago, on July 1. The business will be operated as the Autovent Fan and Blower Division of the Herman Nelson Corporation. The complete line of Autovent products will continue to be manufactured in Chicago.—The Herman Nelson Corporation, Moline, Ill.

• *When inquiring, refer to* **NS238**

NEW LITERATURE

Latex Biological Models

Pupils can study and handle the new latex biological models described in the recently published catalog of the NEW YORK SCIENTIFIC SUPPLY COMPANY, 111 E. 22ND ST., NEW YORK, N. Y., without making their teachers nervous. These models are truly unbreakable, the manufacturer states, and can be tipped over, struck by other objects or even dropped on the floor without damage. Included in the catalog are models that can be used as teaching aids in the study of anatomy, embryology, zoology and botany.

• *When inquiring, refer to* **NS239**

Revised Ditto Workbooks

A completely revised language and arithmetic series for use from the first to the eighth grades is featured in the revised Ditto ink printed workbooks published by DITTO, INCORPORATED, HARRISON AND OAKLEY BLVD., CHICAGO, ILL. Twenty-five new and revised manuscripts are now included in the 50 workbooks that are available for all elementary school grades. A catalog describing the contents of each book is available on request.

• *When inquiring, refer to* **NS240**

Drawing and Art Supplies

Crayons, inks, pencils, water colors and tempera colors are a few of the products of the AMERICAN CRAYON COMPANY, SANDUSKY, OHIO, that are listed in the manufacturer's new catalog No. 341. Also included are Hygeia chalkboard cleaner, sight protective chalks, painting crayons that are easily soluble in water and the new "Sketcho" oil crayon, which resembles an oil paint in stick form.

• *When inquiring, refer to* **NS241**

Swimming Pool Sanitation

Every phase of sanitary treatment of swimming pools is discussed in the newly published treatise on the subject by MATHIESON ALKALI WORKS, INC., 60 E. 42ND ST., NEW YORK, N. Y. The 50 page book, entitled "Keeping the Pool Safe and Sanitary," covers methods of purifying the water in every type and size of pool and also gives directions for algae control, prevention of the spread of communicable diseases, control of pool-water alkalinity and other details of pool and locker room sanitation.

• *When inquiring, refer to* **NS242**

Educational Film Evaluation

A detailed report that analyzes the subject-matter correlation and quality of films distributed by the Filmosound library has recently been released by BELL & HOWELL COMPANY, 1801 LARCHMONT AVE., CHICAGO, ILL. The quality of films is evaluated objectively on the basis of a three digit, five figure scale that rates each film for contents, photography and sound. The sound films covered outnumber the silent films but 403 silent films are listed to serve the schools and organizations that do not have

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NOTE:

To get further information conveniently, refer to products by key numbers. Each product or new literature item in the What's New section has a key number. For key of products described in advertisements use key numbers assigned to advertisers as listed in the adjacent advertisers' index. These key numbers should be used when writing manufacturers direct or when using this self addressed mailer which requires no postage.

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NEW LITERATURE (Continued)

(*Continued from page* 102)

sound-on-film projectors. The "Utilization Digest of Educational Films" will be sent free to users of 16 mm. educational films who accompany their requests with a statement of the make and source of 16 mm. equipment that they use.

• *When inquiring, refer to* **NS243**

"Red Spot" Lighting Specialties

A greatly expanded line of both fluorescent and incandescent lighting equipment is covered in the recent catalog of the F. W. Wakefield Brass Co., Vermilion, Ohio. A special feature of the brochure is the simplified method of calculating the number of luminaires that are necessary to light a room at a definite level of illumination.

• *When inquiring, refer to* **NS244**

Guide to Buying Soap

Colgate-Palmolive-Peet Company, Jersey City, N. J., has announced the publication of a new and remarkably complete soap buying guide by way of celebrating its 135th anniversary. The guide covers the company's entire line of products from toilet soaps to heavy-duty soaps for processing and laundering. Specific information is included on soaps and synthetic detergents for power laundering, textile processing and general cleaning of all types. The "Soap Buying Guide" will be sent without charge upon request.

• *When inquiring, refer to* **NS245**

Handbook of Building Maintenance

Seventy-four pages of technical information are compiled in the new handbook of building maintenance recently published by Flexrock Company, 2344-A Manning St., Philadelphia, Pa. Many time-saving and material-saving ideas are presented and the book is illustrated with more than 150 pictures, diagrams and mechanical drawings.

• *When inquiring, refer to* **NS246**

Picture Book of Washroom Equipment

No text but plenty of pictures are used to illustrate the washroom installations of the Bradley Washfountain Co., Milwaukee, Wis., in its new catalog on washfountains and multi-stall showers. There are views of washrooms in schools, camps and institutions of all types.

• *When inquiring, refer to* **NS247**

Brushes for Every Use

Brushes of every shape and size for cleaning floors, walls, ceilings and windows are listed in the new catalog of the Flour City Brush Company, Inc., 301 Fifth Ave., S., Minneapolis, Minn. Other cleaning supplies, including steel wool disks, floor scrapers, venetian blind dusters, mops and mopping equipment, are also listed.

• *When inquiring, refer to* **NS248**

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Side Glances—

BE IT commodities or education, the public gets just about what it pays for. Skimp on school support, and the youngsters have only the textbook and the teacher with little attempt made to relate what they learn with life experiences. Pay a little more, and perhaps half of the schools make the effort to educate the individual pupil. Spend real money and the chances are 2 to 1 that a good job educationally is being done. At least, that is the way it has worked out in Rhode Island, a survey, to be reported by William K. Keller in the November issue, shows.

COUNTY superintendents and, indeed, all friends of rural education will find stimulation from next month's account of a survey of Modoc County, California, made as a background for curriculum development. All the teachers participated, with administrative and supervisory leadership from the office of the county superintendent. The general supervisor of the community study, Francis L. Drag, is the author.

THE fear of failure no longer haunts the pupils at Phyllis Wheatley High School, San Antonio, Tex. "F," the failing mark, has been abolished. The results: Assistant Superintendent Portwood will give them in an article next month.

"ART DEPARTMENTS" is the subject of the November portfolio; it will be interesting to look at as well as to read.

Published monthly by The Nation's Schools Publishing Co., Inc., 919 North Michigan, Chicago. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, $2; foreign, $3. Current copies, 25c each. Member Audit Bureau of Circulations.

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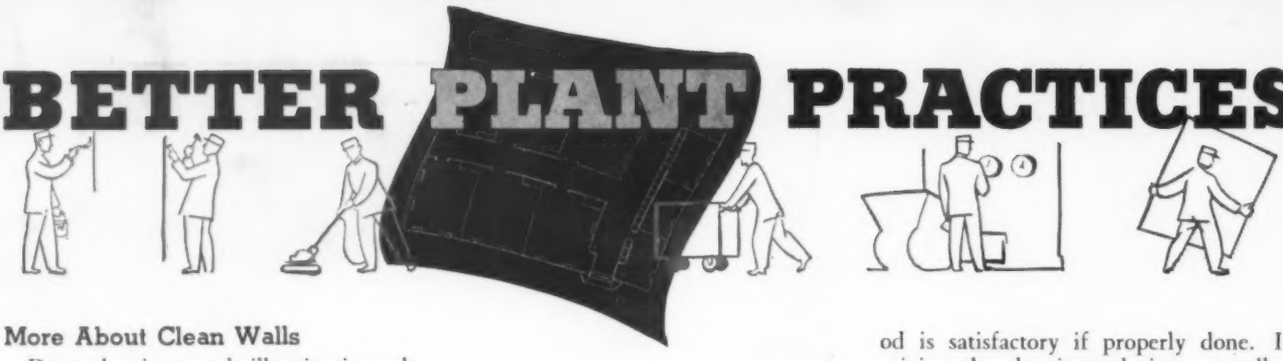

More About Clean Walls

Does the increased illumination obtained from frequent wall washings justify the expense? Following the recent discussion of this problem in these pages, W. A. Davenport, superintendent of buildings and grounds, Michigan State College, reports on tests made with a foot-candle meter in various types of rooms.

"Readings were taken in three rooms in two different buildings at about 7 p.m. under artificial light plus daylight," he states. "From three to five readings were taken in different places in each room. Some of the readings were taken under lights and some in corners and shaded areas. The walls were then washed and readings were again taken in the same locations. In every instance there was an increase of from 1 to 4 foot candles in the illumination. The walls chosen for this demonstration were only slightly soiled, as all of the buildings had been painted fairly recently.

"It is possible to increase the illumination of a room many times, depending on the soiled condition of the walls. This is illustrated by a test made on a room in the foundry shop, a small, dark room used as a classroom, the walls of which were extremely dirty. After painting, the illumination in this room showed an increase of nearly 100 per cent!

"There are many different types of wall washing equipment on the market. It has been proved at Michigan State College that the most satisfactory equipment consists of two pails, one for the cleaning solution and another for the rinse water; clean sponges, and ladders or scaffolding. The cleaning compound should be such that it will cut the dirt without injuring the painted surface.

"Procedure in wall washing varies. Some maintenance men begin at the bottom and wash up the wall; others begin at the top and work down. Either method is satisfactory if properly done. In mixing the cleaning solution, regardless of the chemical used, it is advisable to start with a weak solution and add cleaner until a mixture is obtained that will remove the dirt satisfactorily without injuring the paint. One pail should contain clean rinse water.

"The area to be washed depends on the type of wall and the kind of paint on the wall. When flat paint has been used, only 2 or 3 square feet of space should be washed at one time because the solution should not be allowed to dry at any time during the operation. A full gloss painted area should not exceed 4 or 5 feet square, or an area within easy reach without moving the body too far. The whole area should be rinsed immediately after being cleaned and it should not be allowed to dry until it has been well rinsed. Particular care should be exerted to keep the rinse water clean.

"Any particularly bad marks on the walls may be removed later by spotting

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with a little stronger solution. This eliminates the danger of making the solution so strong in attempting to remove the mark that the rest of the paint is injured.

"Careful washing at proper intervals will result in better illumination for classes and will not add too great a burden to the cleaning budget."

Well-Kept Windows

School windows usually receive three or four exterior washings a year according to a recent check among maintenance officials. In downtown areas or industrial centers the number of such beauty treatments may be increased. Interior washing is administered every month or six weeks or as it is needed. In the majority of school systems the work is done by the regular custodial staff, although in those places where additional service is required it may be let out on contract. Frequently, inside cleaning is done by women assistants or matrons.

Clear water with a squeegee roller for drying seems to be the favored method, chiefly because it is quickest and cheapest. A chamois may be substituted for the squeegee and mild abrasives are employed where conditions demand more drastic treatment. Sometimes a local product is used.

Regular Schedules

Fairly typical is the set-up in Evansville, Ind., where Rufus A. Putnam, assistant superintendent in charge of business affairs, reports that window exteriors are washed three times a year, *i.e.* at the beginning of the fall term, during the Christmas vacation period and in the spring. "They are washed more frequently in schools in the downtown area or near an industrial center," he adds.

The inside of the windows in Evansville, on the other hand, are washed once a month except during the summer when the schools are not in session. A regular schedule is maintained by each custodian for this inside cleaning. All windows are washed by the regular school custodian and his assistants, although some of the inside work is done by matrons.

Outside Help Required

The practice approved in Evansville is much the same as that followed in Hartford, Conn. Edwin F. Nelson, assistant superintendent in charge of business affairs, tells us that windows are washed inside and out three times a year—before the opening of school in September, at the Christmas vacation and the last of March. In addition, there is frequent cleaning of glass in the doors. "The work is done by regular janitors except in the larger schools," he states. "There, the janitors' time is so completely allotted that outside help must be employed for window cleaning. We find it more efficient to turn this work over to contractors."

"We have recently adopted a uniform method of washing windows in all of our schools," Mr. Nelson explains. "We find it more effective to wash them with a piece of folded burlap in clear water and to dry them with a chamois. We use no swing scaffolding. In our newer buildings the outside of the windows can be cleaned from the inside; in the older buildings we use commercial window jacks."

Same Rules Apply

Four times a year for outside cleaning, as the weather permits, is the rule in Erie, Pa. C. A. Sapper, secretary, explains that inside windows are washed every six weeks on a carefully worked out schedule that provides for a certain number of windows to be washed each week. All window washing is done by the assistant custodians; the cleansing agent is purchased locally.

In Indianapolis there is no definite schedule; exterior cleaning is done as needed. This work is performed by the regular janitorial force after school hours and on Saturday morning.

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LOOKING FORWARD

Freedom of Conscience

THROUGHOUT the country there is an increasing number of instances of growth in intolerance, particularly with respect to certain religious sects and sincere conscientious objectors. Some of these intolerances, unfortunately, are beginning to be practiced by our public schools. We recommend thoughtful reading of the significant minority opinion of Chief Justice Harlan Fiske Stone when reviewing the contest between Jehovah's Witnesses and the board of education of Minersville, Pennsylvania. The principle enunciated by the chief justice is fundamental to democracy:

"Expressions of loyalty, when voluntarily given, may promote national unity. It is quite another thing to say that compulsory expressions of it in violation of religious convictions are so important to national unity as to leave a school board free to exact them in spite of the constitutional guarantee of freedom of religion. The Constitution expresses more than the conviction of the people that democratic processes must be preserved at all costs. It also expresses a faith and a command that freedom of mind and spirit must be preserved, a freedom which government must obey if it is to adhere to that justice and moderation without which no free government can persist."

These words are worthy of being printed in display type and hung in every classroom, superintendent's office and board of education meeting place in the United States. The principle expressed is fundamental to the maintenance of democracy for which we are now making such heavy sacrifice. There is little merit in winning this war on land, sea and in the air if in the process we lose our soul at home. The public schools must remain tolerant!

Health Problems

DATA obtained from medical examinations of individuals drafted for military service merely confirm the opinions that many of our leading physicians and health authorities have held for years. The general thesis of the medical profession has been that the development of dynamic health includes more than strenuous and widespread exercise and heavy play programs. The first essentials for health are good housing, good food and adequate medical attention in early childhood. If these vital needs are provided in infancy and childhood, many more individuals might derive greater benefit from heavy exercise programs later. Even under the most favorable conditions it will still be necessary for certain individuals to gain strength by resting instead of by heavy exercise.

Public school physical education programs usually err by providing too much exercise for the few and not enough sensibly regulated exercise and rest for the many. Too much attention is given to building exhibition gymnasiums in which the physical needs of the total student body are gravely neglected. Too little emphasis is as yet placed on provision for adequate cafeterias and large relaxing rooms in which those individuals who do not profit from heavy exercise and strenuous play may receive the benefits of a physical program adjusted to their individual needs. Curriculum specialists, administrators, physical education teachers and school architects need to give as much attention to the provision for adequate rest and relaxation as they do to gymnasiums.

Church Membership

THE federal authority makes a special census of religious faiths and church membership in the United States every decade. The basis for these returns is the statement of the minister, priest or clerk of the church. Some churches maintain a permanent membership roll and every active or inactive communicant is counted as a member. Certain sects start counting with birth while others do not consider an individual a member prior to baptism, which usually occurs during adolescence. Since church member accounting varies from sketchy records to a fairly accurate procedure, religious census returns will always be in favor of the churches. Reported church membership has little relationship to attendance.

Data reported under these most favorable conditions by the churches have a special significance in terms of growth and trends of growth. The 1926 religious census reported a total institutional membership for 213 sects of 54,576,346, or 47.6 per cent of the total

population. The 1936 religious census cites total membership for 256 sects as 55,807,366, or 43.4 per cent of the total population. It is extremely significant that while the total population increased 10 per cent the total church membership during the same period increased only 2 per cent!

Just as significant as the decline in church membership in relation to total population growth is the reported decrease in expenditures. The churches of the United States spent $298,000,000 less for all purposes in 1936 than in 1926. The decline in the total value of church property was $425,000,000.

When church membership is broken down into major sects, organized Christianity forms slightly less than 40 per cent of the total population! The Jews account for slightly less than 4 per cent and cults and other nonChristian persuasions, for less than 1 per cent, making a total of 43.4 per cent.

The last decade has been a serious one for churches in the United States. Religious journals are frequently pessimistic and a number of them make no attempt to cover these salient facts of institutional decline. Sabbath schools have decreased heavily in larger communities and this change is also becoming noticeable in smaller centers. Church organizations have themselves come to believe that there are too many churches; the growth of the union movement in small communities bears evidence of this fact.

The institutionalists, particularly the clergy, naturally view these conditions with alarm. In terms of institutional welfare, they are significant. They should not be translated to indicate a decline in real religious spirit or living. It is our own contention that there is more vital and active religion in the United States today than ever before and this condition prevails in spite of the decline in relative church membership. While it is debatable whether the nation may be called Christian in the narrow sense of the term, it must certainly be considered extremely religious in the broader use if idealism, respect for personality, tolerance, neighborly practice and willingness to help the underdog are considered as religious expressions.

A New Package?

ADEQUATELY trained public school teachers in the United States have for many years endured relatively low salaries in comparison with the other learned professions, with the exception of the ministry. This condition has been due in part to the public's attitude toward its servants and the predominant number of women teachers in the profession, as well as to inadequate administrative structure. The habit of exploiting women teachers started during the War Between the States and has continued to the present time. This exploitation was tacitly admitted by the use of a double standard for salaries. Despite the protests of teacher organizations, this practice of paying the male teacher a substantial differential continued until well after the enactment of the nineteenth amendment.

The surface elimination of the double-standard salary schedule has been going on apace since the World War. Practically all of the larger school systems outwardly, at least, pay "equal sums for equal work." Underneath the surface the picture varies somewhat. In many small school systems written salary schedules are deliberately avoided so that male teachers can be paid more. Titles that are without function within the particular system carry with them salary differentials. When public opinion will not openly countenance large differences, a "bonus" may be secretly provided athletic coaches by the chamber of commerce, a group of business men or even through allocation of a portion of gate receipts from athletic contests. In the larger centers these subterfuges are not so easily maintained. Here it is not unusual to start the male teacher on the salary schedule at from $200 to $300 higher than the equally capable woman teacher.

The most widely practiced theory of teacher wages in the United States is payment in proportion to the value of the work and the competency of the individual involved. In recent years the sociologic theory of wages that has been popular for many years in French schools has been discussed and even promoted here. This theory of wages assumes that marriage and the production of children are the business of the state and should be rewarded on a purely statistical basis. Under the French system teaching at different levels was paid for at a fixed or flat rate with no growth incentives in terms of salary increases. If you lived with your wife and produced children, you were subsidized for these meritorious services by a grateful state. When one ceased to be biologically productive, when the children grew up or when one attained the status of widower, these extra rewards were lost.

American imitation of the sociological theory of wages has produced a few salary schedules that follow the American pattern except that a salary differential, ranging from $100 to $400, is allowed the married male. No provision is made for the married female teacher, apparently on the quaint assumption that only the marriage of male teachers is socially productive and desirable. When the "pedegese" and ballyhoo are stripped from these new efforts, the American imitation of the French schedule has an odor heavily reminiscent of the old double-standard schedules developed when men were men and women were enduring the status given them by Saint Paul, bachelor.

If this latest "advance in scheduling salaries" is a device to disguise a double-standard salary schedule, it is desirable to bring it into the open and give it the pitiless barrage of publicity it deserves. If it is a sincere but possibly misguided attempt to introduce a new theory of wages where rewards are based on

biologic production instead of increased competency in teaching, the idea should be critically examined.

It is questionable whether our people are ready to admit that marriage and the production of children are the business of the state. The American theory that salaries paid to teachers are a reward for service and competence is a much better basis upon which to construct schedules than assumptions that are foreign to American beliefs. We refuse to accept a permanent salary ceiling for teachers with special rewards for extracurricular social efforts that are unrelated to teaching. Equal pay for equal work without regard to sex is still an excellent goal for which to work.

Vocational Education

MEMBERS of the teaching profession and community leaders might profitably give careful attention to the statements of Walter N. Polakov and William H. Green in the July and September issues of The NATION'S SCHOOLS concerning the needs and the future of vocational education. Both of these men are high in labor circles and, in addition, Walter N. Polakov is a national authority on scientific management and technological problems.

The general trend of their arguments is that the continued rapid deskilling of occupations in this age of power makes the training of youth in highly specialized vocational skills within the school a doubtful venture. They believe that the school should cooperate with industry and labor organizations in vocational training by providing the general education and general qualities that the individual needs and by insisting that the factory and union accept responsibility for the development of intensive and specialized skills. They disagree definitely with the vocationalists with respect to the provision on the secondary level of so-called "finished skills."

The qualities required by the power age, according to Polakov, are "sustained attention, correct perception, prompt reaction and cooperation" and grow out of general and physical education just as much as they do out of the more specialized vocational activities. Alexis Carrel believes that modern man requires "mental equilibrium, nervous stability, sound judgment, audacity, moral courage and endurance." These qualities are not peculiar to vocational activities but stem from exposure to a broad and deep curriculum.

The danger to democratic education is that vocational education under the narrow bureaucratic control of the Office of Education may produce a serious imbalance both in the curriculum and in the school system as a whole. The philosophy and practices of the vocationalists, from their initial rise to power during the World War to their attempts to control and dominate the curriculum as a result of this war, may lead to a dangerous dualism in education unless they are carefully checked. The tendency toward the development of narrow vocational schools may even break down the concept of classlessness that is so vital to democratic education and life. To the extent that the one-way American plan for the education of all, with the door of opportunity wide open to ability, is closed, the national concept of classlessness will be diminished.

The American public school must remain a single system, free and open to all. Careers must be kept open to ability! The interests of the people and the children must be kept superior to the interests of any selfish short-sighted pressure group. The American public school requires a balanced curriculum through which each child may receive, in accord with his needs and capacities, indoctrination in the principles and practices of democracy; a sensible understanding of our economic life; a chance to evaluate opportunity for life careers, and opportunity to develop balance of personal growth by means of a well-rounded education. Vocational education may well be confined to training in general principles and in general skills.

It is unwise to permit the high emotions of this war period, so smartly woven into the extensive and expensive personal propaganda of the federal-state vocational agents, to cloud the issue that the schools must face consistently and continuously, *i.e.* the maintenance of a one-way system of public schools, free and open to all, unhampered by narrow deterministic and mechanistic philosophies.

El Paso Graduates

IN AN attempt to determine what part graduates of El Paso High School felt the school played in their lives, a study of the graduates from 1887 to 1934 was recently made by Lillian G. Huggett and published as a special edition of the *El Paso Schools Standard*. A carefully selected and balanced group of 1500 of the 5000 graduates was decided upon and these people were then questioned concerning the influence of the school in their lives.

The results were apparently surprising to those engaged in the study. English and mathematics led the list of "most valuable in occupational preparation" with all other courses trailing far behind. Specific vocational subjects and many of the extracurricular practices fared poorly. Activities favored by the El Paso graduates included debating, glee clubs, literary clubs and dramatics. The study does not prove anything in particular but it is an interesting general appraisal by graduates of the value of secondary training to them in terms of their life experience to date. The El Paso schools deserve to be congratulated upon their objective approach to this problem.

The Editor

Baltimore's

JOHN L. STENQUIST

Endless variations of enrichment are possible for the gifted child.

PUPILS who through great native endowment achieve well in advance of their companions are too often assumed to be progressing "splendidly." But there is no adequate basis for the assumption that "Genius finds its own road and carries its own lamp." Genius, too, is entitled to its proper nurture and, what is more, requires it just as surely as do the dullard and the child of average ability. All that we know of the laws of learning certainly apply to the child of superior endowment as to all others.

Whether or not we are providing an intelligent kind of education for our gifted children is a matter about which far too little is known. To discover what is proper nurture for this type of child is so difficult that but little evidence, of scientific value, is available.

One of our ablest investigators, Leta S. Hollingworth, said: "When we turn from selection to training, we must confess that we know far less of how to train leaders than of how to select them. In respect to the intellectual training of leaders—what they should know—there has been little intensive thinking since Plato. . . . Children of 130 I.Q. or above learn all that the elementary school requires in less than half the time allowed. The rest of the time is left for an enrichment program. In such a program emotional education may be even more important than intellectual training. How shall we avoid the conditions which, under the prevailing system of mass education, tend to produce emotional habits destructive of leadership?"

We, in the Baltimore school system, do not mean to say that we have discovered the answer. The only claim that can be made is that an increasing interest is being developed in keeping with the conviction that this is a problem of major importance, particularly for education in a democracy, where the discovery and development of leadership within the masses constitute a basic tenet.

The difficult but crucial experiment which could tell specifically and finally that "this" program is the right one for the best possible education of genius and that other programs are surely not has thus far not been made, if indeed it ever can be. Under the circumstances, schoolmen everywhere are forced toward empirical methods.

The hopeful note is that something is being tried; the weakest point is probably the lack of any adequate long range check-up of the validity of the efforts.

Baltimore, in common with many communities, has in operation many experiments in enrichment, acceleration and variation in courses to fit the apparent needs of pupils of superior ability, from first grade through high school. Most of these appear to be working well.

In the primary grades, for example, for several years a plan of limited acceleration (a superior pupil may complete three years of primary work in two and one half years) has been combined with an enrichment program; similarly in the intermediate grades, three years of enriched work may be, with enrichment, covered in two and one half years.

A total acceleration of one year is thus permitted in the six year elementary school. Greater acceleration, while tried earlier, is looked upon with suspicion because the very young, though bright, child is out of place in secondary schools as now organized. Accordingly, reliance is placed upon enrichment rather than upon too great acceleration.

In Baltimore a persistent effort is being made to broaden the definition of superior ability. While I.Q. ratings are available for all pupils, these are not, by themselves, considered adequate evidence of ability. Cumulative achievement test records, classroom records, special abilities, physical and social maturity and health are utilized as fully as possible. To be sure, these involve much personal judgment and some vagueness in standards but, even so, they are believed to be more definite and trustworthy than I.Q. ratings alone.

Except for the general gradation

Plan for Superior Pupils

Director of Research
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From the very beginning individual differences challenge the public school.

into classes of fairly homogeneous ability, there is no segregation. It is believed that to segregate pupils of marked abilities would involve serious losses in the social development of the pupils who, like the others, are to live with one another no matter what may be their ability. In acceleration, the skipping of whole grades and the grouping of two grades' work in one are avoided because of danger of resultant gaps in subject-matter knowledge.

Summer schools are provided in which a superior pupil may do the work of a semester in shortened time. An example of these is the Homewood Demonstration School which through the cooperation of the Baltimore department of education and Johns Hopkins University has been in operation since 1921 as a summer school for able pupils in the elementary and junior high school grades. Children in grades 2A through 9A, upon their successful completion of an eight weeks' session, are recommended for promotion to the next higher grade in their regular school in September.

There seems to be an increasing conviction that appropriate education for the superior child is an art as well as a science. "The fundamental characteristics of the activities provided for gifted children should be as much qualitative, if not more, as they are quantitative," says Charles F. Willis. "Education for many pupils has the characteristics of an intelligent and sensitive system for living. A quantitative expansion of such a curriculum could not adequately develop the higher mental capacities of the gifted child. Not more work but better work is most necessary for him.

"Reflective thinking, problem solving and constructive inquiry are essential in a democracy, which is dependent for its survival upon citizens desirous of serving their communities and equipped with the necessary knowledge and powers for clear thinking. Therefore, those educational enterprises that require such qualitative endeavors as originality, open-mindedness, responsibility, leadership, service, experimentation and research will be the most valuable for training the best minds of our nation."

The following goals have been suggested:

Intellectual

- Develop a wholesome personality.
- Practice the technics of critical-mindedness and inquiry, rather than the espousal of causes.
- Apply problem-solving technics to new experiences and theories.
- Develop a wholesome sense of humor as distinguished from frivolity.
- Attempt to determine the frontiers of learning in fields of endeavor that are studied in class.
- Understand the importance to successful life of individual initiative and self-determination for each and every educable pupil.

Ethical

- Cultivate a respect for the personality of self and others.
- Recognize and respect the limitations of people and the influence of time upon them.
- Appreciate and illustrate the continuous and all-pervading characteristics of life, both human and physical.

Physical

- Use orderly means only to attain desirable ends.
- Appreciate and attempt to acquire the skills of good workmanship.
- Develop a healthy body.

Social

- Faithfully determine, accept and discharge responsibilities.
- Adhere to the ideal of working peacefully with and for others.
- Appreciate the need for and attempt to acquire suitable abilities in recreational activities.

As a result of efforts with modified curriculums for pupils of superior ability, a considerable body of curriculum materials has been accumulated. These materials indicate how the alert, ingenious teacher can enormously enrich the educational value of almost every topic of subject matter. So, too, are shown the possibilities for the superior pupil through taking part in school-wide projects.

As early as 1902 "preparatory centers" were established in Baltimore for superior pupils completing the sixth grade. In these centers, pupils completed not only the work of the

seventh and eighth grades but almost the equivalent of the first year of high school. These pupils were then enrolled in the second year of high school and usually were graduated after three years in high school. One such school is still maintained.

For many years it has been the policy of the Baltimore senior high schools to provide rapid advancement of able pupils. One of the earliest experiments was the *A* course at Baltimore Polytechnic Institute, a course for selected pupils in which four years of high school plus the equivalent of the first year of college is covered in four years. Graduates of this course are admitted as sophomores in leading colleges. Pupils for this course are rigidly selected on the basis of I.Q. and past scholastic records and of the crucial trial first term at the school. Any pupil unable to qualify is reclassified into other courses. The success of the *A* course and of similar experiments in the other high schools of the city has been marked. While the chief aim of this accelerated college preparatory course is to shorten the time of preparation for capable pupils planning to enter the professions, an important secondary aim is to prevent brilliant pupils from becoming bored with unsuitable study programs.

Experiment in Enrichment

In 1935 a junior high school enrichment experiment was launched (Garrison Junior High School) in which all adjustments of the curriculum were to be in terms of enrichment without affecting acceleration. The aims and objectives formulated by the committee in charge were "to stress the creative and experimental; to encourage wide reading and thinking, and to develop skill in the organization of materials, in testing the validity of ideas and in grasping significant facts and applying them to new relations. It was hoped in this way to stimulate imagination and to cultivate initiative, tolerance and originality."

The program has now been in operation for nine semesters. "While there is nothing new about the idea of enriching the curriculum for superior children, what is new, at least in part, is that the teachers at Garrison definitely planned a procedure with definite goals to be kept in mind," declares Achsah E. Gibson. "Whether or not these goals are attained rests at present on conjecture. But, after frequent observations of socialized procedures in which statements of classmates are often challenged and proof given; where criticisms of compositions are tactfully offered and graciously received; where reviews are conducted by the children themselves; where opinions are debated and difficult texts handled; where facts learned are contrasted and compared with those learned in other subjects or tied up with current or past events; where evidence is shown of a growing ability to organize, to summarize and to depend less and less on encyclopedias and minute biographies; where, in short, there is apparent such unmistakable evidence of superior achievement, we cannot avoid the strong conviction that here is something well worth our efforts, and supervisors and administrators have encouraged the faculty to continue the experiment."

A similar enrichment experiment has recently been launched on the senior high school level. With due regard to the limitations of acceleration as a means of providing for the gifted pupil, in 1937 an enrichment program was begun at Baltimore City College, a senior high school for boys. The aim as stated by Vice Principal Henry T. Yost was "to have the pupil of more than average ability work more nearly to his capacity by offering him material quantitatively and qualitatively adapted to his skills and interests. . . .

"The first group of boys taking the enriched course was graduated in June 1939. Of the 80 boys in the course, 57 have gone on to college where their work has been most successful, judging by reports for the first semester. But, whether the boys went to college or not, every expression of opinion that we have had from them has been one of commendation for the course. All have admitted that they had to work harder, but in two years only three boys who wanted what they called 'Commercial English' have requested to be changed from the enriched class. When we compare this record with that of the accelerated course, which dropped from 42 to 16, it may be seen easily that, from the pupil's viewpoint in this school, enrichment is more popular than acceleration."

Many other experiments are in progress which, for want of space, cannot be adequately dealt with here. Administrative and organizational problems have given some difficulty yet solutions have been found. Problems of guidance, articulation and character development, likewise, grow not less but more acute as we attempt to fit the program more closely to these superior pupils. Solutions have for the most part been found.

On the secondary, as on the elementary, level considerable instructional material in the various subjects has been developed or gathered. In English, in modern languages, in geography, in Latin, in mathematics, in science, in history and in other subjects our teachers have developed significant materials of instruction and have provided a type of education markedly richer in content than that formerly used.

Teachers Also Benefit

On the emotional side, the rule seems to be universal that teachers "like to teach" superior pupils whether in kindergarten or high school. Whether or not teachers who "like to teach" superior pupils are capable of really doing so is another matter and probably the crux of our problem. In our experiments it has frequently been reported that the teachers themselves have been enriched; that they have had to do wide reading and thinking; that they have needed to test the validity of their own ideas.

That the success of our various efforts is in the last analysis conditioned directly by the quality of the teacher must be axiomatic. While it is true that there must be adequate organization and effective administration, the teacher is as always the supreme factor.

Whether or not our efforts to provide a more adequate educational program for the superior child are in the right direction is most difficult to answer. But though we may not be sure about any one best course to pursue in the education of genius, we are certain that the too common policy of neglect is indefensible; that, of all the wastes of natural resources, the waste of potential genius must be the greatest folly; that in its broadest sense there is no problem of greater significance than the education of the gifted child.

Democracy and John Jones

ARNOLD EDWARD JOYAL

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Recognition of the individuality of the ordinary human being—the youngest teacher on the staff and the boy in the back row—is the keynote of democracy in modern education, the author contends

THREATENING the world on all fronts today, in America as well as in Europe and Asia, is a totalitarianism that challenges the very existence of civilization. This totalitarianism may seem to some of the younger or less informed citizens of our day a new phenomenon. Many people have taken for granted such blessings as individual rights, the right to live and let live, the right to express an opinion, the right to own property, the right to worship one's own God in one's own way. As a matter of fact, totalitarianism is an old, old story. It is democracy that is new.

Turn back the pages of history and examine the record. Take the early history of many an ancient people, the Jews, for example. The Jews gave us Jesus and Christianity, and in many ways democracy is merely the practical application in modern life of some of the essential teachings of Jesus. Their history as portrayed in the Old Testament clearly indicates that, so far as they are concerned, the only thing new about totalitarianism is the name. In ancient Palestine the individual did not exist as an individual. There was no Jewish counterpart to our modern conception of John Jones.

With the advent of the prophets like Isaiah and Jeremiah there came the emergence of the concept of the individual. The Greeks, especially the Athenian Greeks, contributed to the concept. With the coming of Jesus and His philosophy we got a new concept of the value of John Jones, the individual.

Perhaps because democracy is relatively new the modern world, yes, even America in 1941, seems to find it difficult to respect democracy—or individuality. Many forces in our everyday life seem to unite to force John Jones back into obscurity. Many agencies and some persons would say to him, "You are not John Jones. You are just a salesman in this corporation." "You are only a pupil in my class." "You are merely a teacher in my school system."

Administrators and teachers should be concerned with the impact of democracy on children, parents and schools. They should recognize that there are numerous forces that tend to smack of this totalitarianism.

Such force is seen in politics occasionally; in the successful curbing of civil liberty in Jersey City under Mayor Hague's administration, for example. It is seen in chamber of commerce reports and in the deliberate and carefully planned attacks on public education that some groups conduct or finance. It is seen in the methods used to attack the Rugg social science books by persons and agencies that are not in sympathy with the democratic objectives of the public schools.

These forces are powerful and their results are of considerable damage to our program of public education. But none of these, at present at least, is of such great actual or potential danger as is the lack of democracy in the school itself.

Too many of our schools are lacking in the democracy to which they outwardly give allegiance. They neglect John Jones, the individual. Of course, this indictment applies to particular systems and schools in varying degrees. Some schools are making an honest effort and doing a good job. A publication of the Educational Policies Commission, "Learning the Ways of Democracy," cites considerable evidence of that fact from school systems all over the country. But, by and large, our schools are not as democratic as they both could and should be. There are some school board members and school superintendents who are little dictators. The schools open the year with the program all set up by the administration. The program of studies is determined, the schedule is drawn up, the teaching assignments are made, the whole program is laid out all without reference to the teacher or the pupils or the parents. The latent ability of the teaching force and the student body is not used.

Mr. John Jones, the teacher, is a mere cog in a school machine. Of course, the administration must ordinarily lead out. Of course, the public expects the schools to be "ready to go" on the opening day of school. Of course, it may be slower, harder work to draw the teachers into the picture, at least, at first and until they learn to expect to cooperate in these matters. Similarly, it may be easier to "run a school" without bothering to take account of the suggestions and the participation of the pupils—the "papa knows best" type of administration.

Not all of the criticism can be leveled against the administration. This lack of democracy often is expressed in the relation of teacher to pupil. It is here that it becomes most dangerous and fraught with most significant implications. However critical one may be of so-called "progressive education," he must agree that its emphasis on democracy through the recognition of individual needs and individual rights is a good omen.

Yet, in how many classes do teachers still teach only facts—and forget individual boys and girls? In how many rooms is John Jones merely one more name on the class register, one more paper to correct, one more cog in the classroom machine? The paramount job of the modern school is not to teach subject matter, as such, but to cultivate John Jones, even at the expense of some subject matter.

As teachers give greater recognition to individuals, as they modify

their practice to meet the abilities and limitations of our pupils, as they change their procedures to put more emphasis on cooperative planning and on truly democratic processes in school, they will develop this intangible something that we call democracy.

All right! If it is as simple as that why do not schools give the idea a trial? Why do we not at least put it to the test?

Why Changes Are Not Made

There are reasons why many otherwise alert, conscientious and able administrators and teachers hesitate to change their procedures. They know something needs to be done to make the schools more democratic and to give greater recognition to the individual pupil. They are familiar with some of the suggestions that are being made. They may even read splendid books, yet they seem to be afraid to modify their procedures.

A few, of course, are too lazy. Others, perhaps, are indifferent, professionally dead. Still others like to do what was done to them and be labeled good safe conservatives, just because every community has a conservative body of citizenry that likes to be pleased—and pleasing it is often pleasant and sometimes profitable.

Why do many teachers not accept the newer ideas and at least try to do something? Very often they say: "Tell me how to do it and I'll try, but you critics talk always of objectives and goals and never of ways and means. It is all very well to say: 'Make the school democratic' or 'Give Jones his privileges as an individual.' What am I going to do? Be specific."

This leads to the first suggestion. Where a teacher is going and just where he will come out in the course of study does not make as much difference as one may think. It is the process, the activity that counts. The fact that together teacher and pupil planned the work makes it worth while. Whether or not particular experiences in the course of study are going to be meaningful and significant to John Jones is a matter to be investigated cooperatively. If he is ready for those experiences, if he feels that the work is interesting and worth while, then John Jones should go ahead.

This matter of planning the work will depend on many factors, factors that may be different for each member of the class. Of course, then, it will not be possible to know in advance just when and where the class will lead the teacher in its study. The teacher should recognize that the important feature in the process is the willingness to venture forth with courage. Democracy is a process, a way of life.

Many wise and effective teachers and principals have not known precisely where they were going in terms of specific subject-matter goals, have not known just where they would come out. But they understood the basic principles. They boldly started out and, perhaps to their surprise, found that it was the process of experimenting, the activity involved that made the work significant; that in spite of lack of organized subject matter and orthodox methods pupils seemed to learn more, certainly were more interested and quite obviously learned to participate more directly in the affairs of the group than had ever before been the case.

Pupils Want Significant Problems

Much of the traditional subject matter presumably learned in high school is forgotten anyhow. Much of the orthodox subject matter presented in schools has little or no significance to pupils in everyday life. But pupils do wish to study subject matter as it relates to significant problems that they face. What is more, when they get exposed to subject matter in connection with life situations they are likely to regard the material as important and really to make it a part of themselves.

Now some teachers probably would say: "Oh, but the really good pupils suffer under those conditions. Pupils really do not learn as many facts under such a setup. Especially do prospective college students need this body of factual information and, after all, my success or failure is decided largely in terms of how well these students perform on examinations and how well they succeed in college."

In the first place if high schools are dominated by colleges to any such extent they had better write their educational Magna Charta. Even if this charge has some element of truth in it there is a great deal more to be said.

And this is the second point. Strange as it may seem, there is every reason to believe that the net addition to knowledge of significant subject matter will be just as great under this newer approach as under the more orthodox method. I watched a significant experiment for seven years (1933-1940) at the University of Denver. The study involved a group of nearly 200 so-called "progressive education" students who were products of classes in Denver high schools. These students had entered university and had been there from one to three years. This group was matched against a comparable group of students from traditional high school classes. The study was carefully supervised. The experiment was statistically valid and reliable.

"Guinea Pigs" Compare Favorably

The college students who had been freed of the required and orthodox courses in high school and in many cases have been "guinea pigs" for three years performed just as well on subject-matter tests, received equally good marks and in every way seemed to be equally competent in college as were their fellow students who had taken the traditional work.

That such is generally the case is apparently borne out by the findings of the Progressive Education Association's eight year study. While the official report has not yet been published the Nov. 25, 1940, issue of *Time* reports findings that (1) "the more extremely progressive the high school the better its graduates did in college" and (2) "progressive" students who went to college received slightly better grades in standard college subjects, went in for more extra-curricular activities (except athletics), took a more active interest in politics and art, wrote more and read more books. Apparently, progressive schooling is, at least, no handicap to success in college.

From several points of view, therefore, and for many reasons teachers should be willing to accept the challenge of trying to make democracy really work. In the last analysis this can be done best by recognizing the individual pupil, the kid in the back row, John Jones, the common man—his needs, his rights and his responsibilities.

Homeroom Harmony

OLIVE ECKERSON

Teacher of English and Music
Woodrow Wilson Junior High School, Glendale, Calif.

SHE sat in the February sunlight and looked at the empty desks before her. She was scared. In just a little while she would see that door burst open and 45 ninth graders come pouring in for their first homeroom session in the new term. She thought of her last class, those brilliant erratic adolescents that had gone on to senior high school this week.

What of this new class? She had expected a bunch of scared excited little seventh graders, the girls in pigtails, the boys scarcely dry behind the ears. Instead, she was getting these people about whom she had been warned. Noisy, irresponsible, rude, impossible, nonconformist, these were some of the milder adjectives applied to them by teachers who had struggled with them.

What was it that an older, wiser teacher had once told her about high school pupils?

"In all my experience with adolescent children I have found these three things to be of the most help. Be definite in your requirements, be fair in your dealings with all alike and, above all, remember to laugh with them."

Well, this was simple enough. Would it work?

At 10 o'clock they trooped in, some normally noisy, others unnaturally polite. The bell rang. A pregnant silence fell on the room. She drew a long breath and faced them.

"I suppose it is unnecessary for me to tell you that I am your new homeroom teacher. My old class of boys and girls went on to senior high school last week. They sat in those seats that you now occupy. Incidentally, they were a pretty fine crowd. I've heard some nice things about you, too. We shall probably be together until you leave, and if you can stand me, I guess I can stand you."

No outward response came from the class. Severely, they continued to eye her.

She went on. "There's just one thing that I think you ought to remember. If you will try to do it, it will make everything so much pleasanter for all of us. It's really so simple that you may be surprised at my mentioning it. It is this. I shall expect that all our homeroom meetings be conducted with courteous attention and with cooperation from everyone. That's all."

They were now eyeing each other. What? No lecture about their previous record? No threats? No promise of sure reprisal? What is this? But the teacher was talking again.

"I think we had better get organized as quickly as possible. After all, these are your meetings and you should conduct them yourselves."

A boy raised his hand. "Let's have some decent officers. Gee, last term the ones we had couldn't keep order and everyone talked and yelled at once." A murmur trickled through the room.

Quickly the teacher took the cue. "Your leaders are only as good as you let them be. They can do nothing if you don't help."

The same boy stood up. "I nominate Mary for president," he said.

The class caught on and the election went briskly ahead. Here was a model parliamentary group. Too model, thought the teacher. She was relieved when there was a guffaw from the rear as someone suggested the name of a problem child for one of the offices. In fifteen minutes they were organized with officers.

Redirecting the energies of 45 ninth graders with a collective reputation for inspired deviltry called for understanding, courage and a sense of humor but the results were well worth all of the time and the effort involved

"These officers will be duly installed at our next meeting," said the teacher. In her mind she planned to call together the newly elected officers and give each one a typewritten slip on which were clearly stated his duties for his term of office.

"And now," said she, "I wonder if you will fill out the questionnaire that I have written on the board. I should like to know you all as soon as I can and this is one way to get started."

For the next few minutes all wrote with concentration. The bell rang and they were gone. She drew her second long breath. The initial examination was over. Had she passed?

These were the items that she asked for.

Name
Address and telephone number
Parent's name
Present program
Hardest subject
Favorite subject
How I spend my leisure time
How I earn money
What I want to be
The most outstanding boy in the class
The most outstanding girl in the class
Homeroom activities I favor
Assemblies I favor

She took these papers home and spent the night with them. They told her quite a lot about these boys and girls. She rejoiced to learn that many liked to read, was dismayed to discover that for most of them English was their hardest subject. Many of them favored field trips for homeroom activities; some wanted a radio play, and all wanted a picnic.

She went to their counselor, a sympathetic man who had watched with distress the struggles of this class to be seen and heard. He sketched in the class history and a few profiles of student problems. She found out that wiry little Dallas, one of the habitual offenders in certain classes was an orphan, living

with a grandmother who seemed uncertain as to how to cope with the prankish young one whom she had undertaken to raise. She found that big blond Bill was strugggling along with just his mother, a widow, and that he was bound by the iron chains of necessity to be on his corner selling papers every evening. He couldn't stay after school for punishment and, furthermore, he wasn't going to.

Then there was Al whose mother and father were gone all day, working. There was no one to see that he got to school or that he did not smoke on the corner with older boys. Doug was rooming with friends of the family while his parents were in the East. George, bored to death with school, was mad about photography, had won an award from the Agfa people, and so on.

What seemed to her most significant was the fact that in their choice of outstanding boy and girl the ones selected almost unanimously were two pupils who were excellent citizens and outstanding in their academic work.

The New Term Begins

She went to her second meeting with the class feeling that she already knew a lot about them. She got out the crude little gavel and block that had been made by her previous president and, after installation, the president gravely smote the class to order and the new term was on.

At the time of promotion, plans were in the air for a trip to the National Broadcasting S udios in Hollywood. The class had long wanted this trip but every time it had started to plan such an affair the situation had got out of control and the whole thing had been given up in disgust. Now the children asked the new teacher for permission to be obtained from the office and that plans be made.

The necessary permission was gladly given and with the understanding that the discussion be orderly and systematic the date was set and the arrangements made. The class responded splendidly. There was a short talk about the etiquette of such an occasion and, surprisingly enough, it was the boys who expressed themselves with the greater freedom. It was agreed by the class that they should all behave while at the studio in a manner that would in no way reflect upon the school or upon their own homes.

During the discussion the teacher spotted George sitting over at the side of the room, his plump face set in lines of preoccupied boredom.

"If you will bring your camera, George," she said, "I think you could take some pictures of us outside the studio. Madam president, do you think the class would be willing to vote an expense that this might entail?"

Before she could reply, George looked up as if shot. His face lighted and he smiled a bashful 14-year-old grin.

"Well, if you think the class would be interested," he began. There was a chorus of "Sure, sure, Horner, bring your snap box. We'll pay for the pictures."

George agreed to bring his camera but refused payment. Then he had an inspiration.

"Perhaps I could take group pictures later of the class and if some of them wanted to buy them, then I could do the others free."

The trip was a success. They all went, were exemplary in behavior while at the studio, shot off steam coming and going in the bus. Arriving home for lunch, they happily dispersed and actually remembered to thank the two faculty members who had accompanied them. In the hall their teacher met the principal.

"Well, how was it?"

She was able to answer, "Swell."

She felt tired but triumphant. They had survived their first outing with no casualties. And she believed they were actually beginning to like her.

Soon after, she called a meeting of the class cabinet members and they outlined in rough draft their plans for the rest of the quarter. One of the girls expressed herself worried over the tardinesses to classes throughout the day. So it was decided that this matter should be put up to the class and that a goal of a nontardiness record should be adopted as a class project for the next few months.

Another scheme that was hatched at the meeting was that of a class scrapbook in which all of the activities of the class should be recorded. George was appointed official class photographer; Charles, class artist, and Dave, the bustler, who always liked to have his finger in every pie, class historian.

At the next meeting of the class they voted dues of 5 cents a quarter. The treasurer began immediately to collect. Then the problem of tardiness was taken up with enthusiasm by the group. Finally, Dallas, the ubiquitous, popped up with a suggestion that made the teacher gasp.

"Let's fine 'em all a nickel every time they have an unexcused tardiness and give 'em three days to pay it. Then if they don't pay it, we tack on an extra fine of a penny a day for every day that they don't come across."

Few people could have put over such a proposition. But Dallas had enjoyed such a peculiar reputation for deviltry that the class had held him in somewhat inverse respect. That he was now conforming did not occur to his fellows. The motion was made, seconded, carried with dispatch.

The president had enough presence of mind left to make Dallas "tardy chairman" at which the whole class let out a roar. But there the burlesque ended. From then on Dallas was busier than a bird dog. He had a large brown envelope and a fateful yellow card on which were written the names of offenders as furnished by the office records.

"No Tardiness" Goal Achieved

Then came a week when for five whole days not one single member of the entire 45 had an unexcused tardiness to any class throughout the entire day. The teacher had promised a treat of ice cream if the golden goal ever was reached. So on the following Monday this triumph was celebrated with pride and joy. The class meeting was given over to refreshments. While the class ate the teacher read a juicy detective story with a few chills to match the temperature of the food. Most important of all, there was now apparent a feeling of rapport, of belonging together, of being united in a common good cause.

Fridays of each week were given over to the radio play that had been requested in the questionnaire. A committee met with the teacher after school and it was decided that the play should be a series of episodes

in the life of a typical American family, the Greens. The central problem of each episode was sketched, the problem divided into scenes and one person was assigned to write each scene. These scenes were then handed to the teacher who edited them, typed them and handed them to the players for study. If the episode was a little complicated with special sound effects, there was a brief rehearsal on the previous day.

On Friday morning the cast gathered around the dummy mike, the announcer opened the program, the sponsor read the commercial and the show was on. So successful was this radio play that the cast gave a guest appearance and had a cut in the school paper, the *Blue and Gold*. Thus another strand drew the group more closely together.

Toward the end of March the class went on an evening roller skating party. The teacher met here a few parents. She learned several things that otherwise she might never have discovered.

The outing was a success; no casualties and everyone on his best behavior.

Spring brought on an attack of baseball and the B9-1's challenged another ninth grade group to a death struggle. A healthy rivalry was now springing up. It was a contest as to which class could appear more often in the *Blue and Gold*, could gain the more legitimate publicity through stories of activities. Every issue was combed for articles containing names of class members. These stories were clipped, the names underscored with red and the cuttings pasted into the scrap book.

This book was divided into sections. The class pictures were filed under the heading "Rogues' Gallery" and included a number of baby pictures. Clippings went into the section called "We Break Into Print"; the pictures of animals owned by class members were filed under "Our Pets."

Doug, the legal-minded member, drew up a code of class rules, with the aid of a committee and this they styled the Constitution of the B9-1's. It was lettered on a large stiff paper, decorated with gold seal and ribbon, solemnly signed by the three boys who designated themselves the official committee. Since to err is human, the boys and girls occasionally forgot the ideals to which they were trying to live up. Doug was always quick to haul the constitution out of the cupboard, read it to them and remind them of their solemn promise when this set of rules was ratified.

At the end of the quarter, new officers were chosen. Their first duty was the arrangement of a home-room exhibit for Public Schools' Week. With much pride they displayed their various class projects, pointed to their achievements.

But the reputation that the class members had built up during the last two years could not so easily be forgotten. They were learning very late the lesson of working together. For this they paid dearly. The student body election came up and although they put up good candidates and electioneered heartily for their people, they were defeated in the primaries. Candidates belonging to "that class" were frowned on. The class was disappointed but game. It realized that it deserved the rebuke. The members were growing.

As the term began to melt away under the California sun, the matter of the picnic came up. At first the class wanted to invite just its rivals, the 11's, to come, but the excitement spread till all three sections of B9's were fired with the same enthusiasm. The affair was truly the crowning event of the term. The day was hot, the pools were perfect and the abundance of food was augmented by a huge sheet cake frosted in chocolate and marked in white B9-1's. The girls played their rivals on the baseball lawns and won.

The last meeting of the class rolled round. President Joe called the members to order and the regular business proceeded. He called for the secretary and the treasurer to make a final report. He reminded the class of the chain letter that was to be passed around from home to home during the summer. All members were to write a few lines, then pass it on to the next address designated at the top of the long roll. He then thanked certain class members for helping to make the year a success.

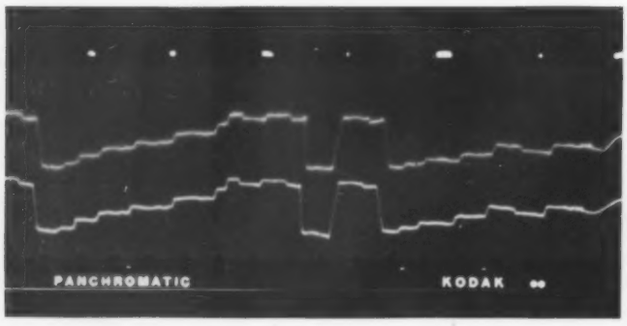
The tardy fines were swelled by a contribution from the treasury so that all might have a last ice cream bar. While they ate, Dave, the class historian, read a humorous and rambling account of the class activities during the last half year.

The year was over. Miracles had not been accomplished. Al still cut school occasionally; Dick was tardy now and then; several were still failing in math or science. But most of the boys and girls were happy and proud of their class, were growing in self-respect and were learning the priceless lesson of cooperation and the compensations that result therefrom.

Diagnostic and Remedial Work

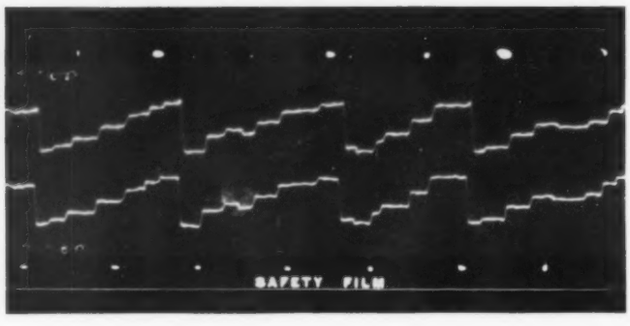
1. In order to correct the reading difficulties of the pupils of the Central High School, Valley Stream, N. Y., a reading clinic was established in the school in September 1938. A standardized reading test is administered to entering pupils early in the school year. If the pupil falls below grade level, according to the results of the test, he is sent to the clinic where his vision is checked and a special diagnosis of his difficulty is made.

2. In the reading clinic the telebinocular test of visual efficiency is given the pupil in order to screen out the possibility that visual disability is the cause of his retarded reading ability. In this test, visual efficiency, sharpness of image, coordination, fusion and color perception are carefully checked and recorded and treatment is prescribed where necessary.



BEFORE: Film taken before metronoscope training. The film reveals information regarding the number of words read per minute, the number of fixations and regressions made per hundred words and the average span of recognition.

AFTER: Film taken following the pupil's twenty weeks of instruction with the metronoscope. This pupil improved somewhat in both mechanics and comprehension but was retained for another period for further training and corrective work.



in a Reading Clinic

EVELYN HALLOCK

Director of Reading, Central High School
Valley Stream, N. Y.

3. The next step in the diagnostic process is to take a photograph of the pupil's eye movements as he reads. This is done by means of an ophthalmograph, which contains a moving picture camera so devised that a record of the eye movements is made on a film. When it is developed, the film affords information that is valuable in diagnosing reading disabilities. A test of the pupil's comprehension is also made at this time. From the facts gathered as a result of the tests, grade placements are determined and a complete diagnosis is made of specific weaknesses. Pupils who fail the telebinocular test or show evidence of visual disability on the film are sent to the health clinic and every effort is made to bring about correction of the difficulty as quickly as possible.

4. Pupils whose tests reveal the need for remedial reading are given special corrective work. Much of the reading training is done by means of a metronoscope. Rolls containing printed material on the desired grade level are inserted in the instrument, which mechanically unrolls the story a line at a time. Ordinarily, each line is divided into sets of three phrases. At the end of each roll are groups of questions designed to check the pupil's comprehension. A daily record is kept of the pupil's work in both speed and comprehension marks.

A Weakness in School Publicity

W. MARVIN KEMP

Superintendent of Schools, Faulkton, S. D.

IN RECENT discussions of social interpretation, which carries within it the phases of public relations and the activity of school publicity, there has been a notable absence of consideration of the question as to whether it is the school authorities or the newspaper people who are taking the initiative in the school publicity enterprise.

Recently, I used the editorial pages of the daily and weekly newspaper as the instrument for appraising the worth, success and efficiency of the activities of the public schools in South Dakota.

In South Dakota the editors have made a clear-cut acceptance of their responsibility as an extralegal appraisal agency of the school as a social institution.

In order to discern wherein and how effectively the newspaper, through its editorial columns, is serving as an appraisal agency of the schools, it should be called to the reader's attention that educational interpretation furnished the subject matter for only 2.66 per cent of the total amount of public school publicity analyzed in the investigation. In practice, my study shows that the average space allotment used in editorial comment of school activities is 2.52 per cent of all space devoted to school news. In reality, this percentage is relatively high in view of the limited space devoted to editorials in every issue of any newspaper.

The following figures throw a clear light on the relative emphasis given in editorial columns to the major activities over which appraisal work must proceed.

It is worthy of note that 35.03 per cent of the editorial content was devoted to an appraisal of what is being taught, how it is being taught and the results that are being obtained. In contrast to this effort on the part of the editors, only 5.3 per cent of the items concerning the executive function of school organization could be classified as material interpreting the instructional phases of educational activity. Topics listed in the category of "instructional activity" cover such items as pupil progress and achievement, discipline and behavior, course of study, health and methods and character of instruction. These five school news topics are among the list of the first six topics in which Belmont Farley says the school patrons are most interested.

Table 1—Relative Amount of Space Given in Editorials to Major Activities Over Which Appraisal Work Must Proceed

Item	*Per Cent*	*Col. Inch.*
Instructional	35.03	240
Finance	31.09	213
Public Relations	14.16	97
General Administration	11.33	78
Records	4.00	27
Personnel Management	0.90	6
Research	0.00	0

Table 2—Percentage of Total Space Devoted to School News Given to Athletics and Extracurricular Activities as Found by Various Studies

Various Studies	*Athletics*	*Extra-curricular*
Reynolds	30.0	No Analysis
Briscoe	25.0	19.0
Grinnell	33.3	No Analysis
Kluckholn	32.0	21.0
Garlin	9.9	11.2
Farley	27.0	20.1
Hyde	54.6	11.4
Kemp	34.7	33.1

Inasmuch as educators have little hand in shaping newspaper editorials, the editors seem to be the active force in an attempt to improve the quality of educational publicity. Educational items covered by editorial comment correlate more closely with reader interest than do releases of news and feature stories concerning the executive functions of school organization. The latter type of interpretation, paradoxical as it may seem, is generally written by the school people yet does not correlate with the expressed reading interest of the public.

Substantiating evidence that educators prepare a large percentage of the school news material is given in an Iowa study by Kluckholn and Peterson, which showed that two thirds of the school news appearing in newspapers, according to the editors, is prepared by the school systems of their respective communities. An investigation by Rollo G. Reynolds indicates that in 83 per cent of the school systems sampled over the nation, superintendents furnished the major portion of the school news.

It would seem, therefore, that the school authorities are the central figures in the school publicity program, yet they, and not the editors, are the ones who have failed to interest themselves in what the people would like to know about the schools.

Farley found, several years ago, that there seems to be a negative correlation between what patrons are interested in reading about their schools and education and what is being released and published in the press. The public, he says, is less interested in the extracurricular phase of school work. Even though extracurricular activities and athletics are important educative agencies, it would seem that the emphasis placed on the dissemination of school news releases concerning these activities is out of proportion to their relative value (Table 2).

The plethora of athletic and extracurricular news stories must be attributed to the school authorities' failure to release the type of information about the schools that the people want to read.

When it is seen that the choice and quality of educational subject matter found in editorial comment correlate more closely with patron interest than does the material released or written by school authorities, it seems to follow that school people are not taking the lead in the enterprise of keeping the public adequately informed regarding the state and needs of public education.

Let Teachers Do Research

It's the Finest Tool of Progress

MARGARET J. SYNNBERG

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FOR many educated people the word "research" never loses its musty characteristics. Associations may color one's mental concepts, it is true, but to go through life with a distorted impression of something that in the light of clearer knowledge might have been preeminently useful to one is sheer folly.

Professors and instructors in graduate schools are often atrocious salesmen of their own wares. Often they impress their students, even win their admiration, dazzle them with their brilliancy, entertain them, frighten them or exhaust them into a sanitarium, but seldom do they bring them successfully to a more comprehensive knowledge of their fields of study. By "successfully" I mean without destroying for life the students' urge to investigate further.

Insistence upon master's degrees for all but the most routine positions in school systems has driven many candidates into graduate schools. Granted that no one should ever be driven into so specialized a place, the fact remains that many graduate students are not lured into higher education by the desire for more profound learning but by the beckoning curves of a dollar sign.

Professors have been virtually compelled to compensate for the absence of real interest on the part of students by resorting to excessive emphasis on the mechanics of their trade. Particularly is this true in the field of education. Without objective, investigation is a stupid business. Without motivation, research is an aimless series of fatiguing motions.

In comparatively large groups graduate students in education are initiated into the intricacies of a business for which they have little taste. Then they search about desperately for a problem that will fit in reasonably well with whatever technic they have recently acquired. The long trek toward a completed thesis begins. And for many candidates it is rough traveling.

When, at long last, the final copies of an accepted thesis are in the hands of university officials, all too many candidates promise themselves that never again, being in their sane minds, will they undertake another piece of research as long as they live. And they mean it.

Ironically, the finest tool for progress in the hands of school administrators is often relegated to obscurity. Research is the prerogative of the outsider, someone who is usually handicapped by his remoteness from the problem studied. The skilled teachers who could undertake a similar investigation more successfully have graduated, not to research but from research.

Teachers and administrators everywhere discover many things only by long experience, much observation and often by distressing failures. "If I only had known at the time—" is a familiar plaint. Not only do a few persons learn the hard way, but many others in similar situations stumble over precisely the same handicaps, experiment with identical useless devices, fail in ways strikingly alike.

Every school should have a standing research committee. Distinctive problems of any school should be

Social Data on 2600 Pupils in McKinley High School, Chicago Gleaned by Teacher Committee in Two Months

Race	
White	86.0%
Colored	14.0%
National Origins (leading 10)	
Italian	49.9%
Negro	13.8%
Irish	6.5%
Greek	5.4%
Mexican	4.5%
German	4.3%
English	3.3%
Polish	2.3%
Dutch	1.3%
French	1.3%
Foreign Born Pupils	
3 per cent, mostly from Italy and Mexico	
Parentage	
American born	
Both parents	34.0%
Foreign born	
Both parents	49.0%
One parent	14.0%
Lineage (Grandparents)	
American born	
Four	21.9%
Three	3.4%
Two	8.6%
One	3.8%
Foreign born	
Four	62.3%
Average Monthly Rentals	
Median	$18.50
Average	19.86
Size of Living Quarters	
Median	5 rooms
Average	5.4 rooms
Children per Family	
Range	1 to 19
Average	4.8
Home Ownership	
Owning home	19.6%
Renting	78.6%
Free rent	1.8%
Facts About Diet	
No milk at any time	24.3%
No butter or ordinary substitute	7.2%
Relief Status	
Families on Emergency Relief	17.5%
Families on W.P.A.	10.0%
Nonrelief families	72.5%
Specific Living Conditions	
Boys living in furnished rooms, hotels, etc.	12.4%
Girls living in furnished rooms, hotels, etc.	5.6%
Home Heating	
Coal stoves	44.8%
Steam, hot water	26.0%
Small oil heaters	14.8%
Furnace	10.6%
Gas stoves, heaters	3.6%
Electric heaters	0.2%
Plumbing in Homes	
Without bathtubs	9.0%
Without washstands	8.0%
With showers	23.0%
Families sharing toilets	14.0%
Stationary washtubs	26.0%
Sending laundry out	48.0%
Families sharing kitchens	2.5%
With available hot water	69.0%
Family Stability	
Living with both parents	69.4%
Both parents dead	2.6%
Father dead (Mother remarried, 1/5)	11.5%
Mother dead (Father remarried, 1/2)	6.7%
Separations (Remarried, 3/4)	9.6%
Language Usage at Home	
English	44.0%
Foreign language	8.0%
Mixture	48.0%
Literacy of Parents	
Fathers read and write English	76.8%
Fathers read and write foreign language only	15.9%
Fathers illiterate	7.3%
Mothers read and write English	67.69%
Mothers read and write foreign language only	20.45%
Mothers illiterate	11.86%

under skilled investigation, not the cumulative observation of one administrator who feels that he knows his own problems and whose knowledge is at no one's disposal, but recorded scientific data.

If 60 per cent of all the children in an elementary school speak Polish at home, every teacher in that school will work more intelligently for knowing that fact. When part of a student body is regularly absent on Jewish holidays, there should be no guesswork about what percentage of pupils is affected. Letting new teachers flounder about, gathering impressions that may or may not be accurate, is inefficient administration.

One is not dotting i's when he takes the trouble to find out how many children in a group drink coffee or how many have Sunday shoes or how many have English newspapers in their homes or what percentage have mothers who work outside of their homes. Many a discouraged teacher has abandoned all ambitious projects because of an unfortunate failure that might have been avoided had she known the neighborhood background.

From an administrator's point of view it is an error to attempt diagnosis without facts. Regardless of how skilled one's judgment may be, he does not speak with authority unless he can show evidence.

Last year at McKinley High School in Chicago the principal, Mrs. Marie Voy Brewster, authorized a survey of pupil backgrounds. The school research committee consisting of four members—Mrs. Rose Halushka, Gerald Haley, Winifred Gundaker and I as chairman—obtained within a period of two months the accompanying basic facts concerning some 2600 pupils enrolled in the school.

Research in a school cannot be listed as a personal obligation of the administrator in charge, but the establishment of a research bureau or committee is his or her professional responsibility. Some principals are fearful of admitting teachers into any activity that removes them ever so slightly from the well-defined status of classroom workers. Other administrators dislike to have information available through sources other than themselves. Still others consider research more or less as a sequence of reports to be filled out, mostly burdensome and useless.

Undoubtedly, the prevalent custom of avoiding statistics makes a change in administrators or teaching personnel a major upheaval in any school. If information about the general characteristics of a school, the neighborhood, the pupils' living conditions and general home life were available to those who must start work in a strange environment, there would be much less confusion than is generally found in such circumstances.

The early explorers made charts and maps to make possible the easier travel of those who followed them. The least that school administrators ought to do is to furnish their successors with objective information which would save these men and women from the repetition of costly trial and error experiments.

Ability Tests in Community School

RALPH EGGLESTON

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THE problem of curricular guidance in a small high school is often a knotty one. This article discusses procedures in a six year secondary school of 700 pupils located in a rural-urban community of 6000 people.

As is the case with other six year secondary schools there are no formal graduation exercises at the end of the eighth or ninth grade levels. Instead, the eighth grade pupils are given a battery of comprehensive aptitude tests designed to enable them to pick a high school curriculum for further study.

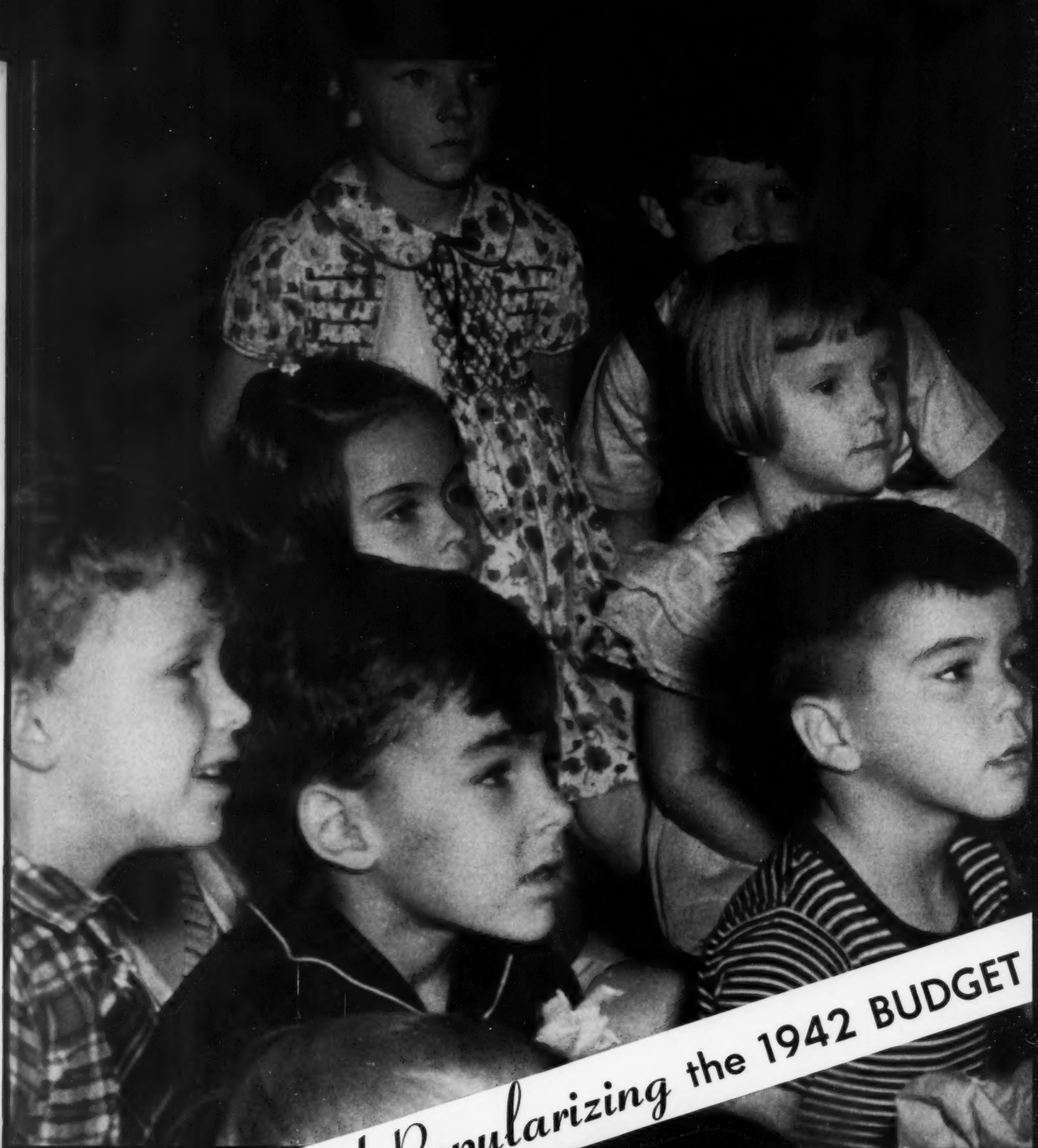
In order to give the pupils a picture of their skills and aptitudes, our program includes three intelligence tests for every child in the eighth grade. Further tests are given in clerical work, mechanical ability, languages, algebra, music, art judgment, reading and handwriting. The intelligence tests furnish an accurate index of a pupil's ability to do book work while the remainder explore possible talents that might prove worthy of further development.

In addition to the testing program all the pupils are ranked on the basis of their report card achievements. For purposes of comparison, they are rated according to their ability to do book work as indicated by the intelligence tests. This is a measure of the ability to accomplish what the report cards show has been accomplished. All comparisons are made in terms of percentile ranks with reference to the entire class. The index obtained from this comparison is the "aptitude deviation."

For example, a pupil who ranks first in the ability to do book work would, if perfectly normal, rank first in report card achievement. The extent to which a pupil is working above or below his ability is the aptitude deviation. Because there are countless factors that might cause an abnormal deviation, this index is used in harmony with the entire educational picture. Also, a margin of ten points above or below is taken into consideration for possible error. The value of the deviation is its ability to predict the possibility of future success in any curricular choice.

Following the testing program, parents are invited to attend an open house meeting at the school at which time the results of the tests are presented and the whole program is "sold" to them. The pupils prepare and present an original play based on materials and problems relating to the high school curriculum. The cooperation of the parents is sought to allow a freedom of choice on the part of the pupils. An attempt is made to eliminate choices based on sentiments or subject prejudices instead of allowing interest and ability to guide.

What are the results of such a program? We have noticed specific values. First, it has resulted in reducing the number of misfits in the high school courses. Second, the pupils have enjoyed rather more than average success in high school, in college and in general employment. Third, it has made the administration of high school classes and the assignment of teachers possible in advance of regular fall registration. These results have justified the time, energy and expense involved.



Preparing and Popularizing the 1942 BUDGET

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There Should Be a Budget

IRA G. FLOCKEN
Chief Accountant and Statistician, Board of Education, Pittsburgh

TO HAVE a workable financial plan that will make it possible for a board of education to provide the extensive services required for a school district, a budget should be prepared prior to the beginning of each fiscal year. This budget should set forth all transactions that are expected to take place in the ensuing fiscal year. It should set forth all the estimated revenues and expenditures.

The budget should be printed or made up in permanent form so as to make possible its distribution to all those interested. The form should be such as to give it dignity so that it will be preserved throughout the year as a guide for operations and so that it will be preserved for the future in order to give statistics for past periods. It should include various departments and divisions of the school system with items relating to each department or division giving in detail estimated required expenditures relating to personnel, materials needed, expenses, equipment, repairs and additions.

In preparing the budget it is necessary to determine and enter the expenditures for the last preceding year. Often it is desirable to list the expenditures for past years, extending back as many as five years. Many of these expenditures are recurrent and may be repeated approximately as estimates for the coming year. However, due allowance should be made for probable changes in enrollment, prices and variations in educational policy.

Prior to the beginning of the fiscal year the teachers, principals, clerks, janitors and other employes should be carefully counted and their salaries tabulated. Provision should be made for salary changes scheduled to take place during the year. All this information relating to each employe should be inserted in the budget either individually or by groups.

Estimated requirements for textbooks, educational supplies, fuel, electricity, janitorial and other supplies should be determined and inserted in the budget. A survey should be made for property repairs and maintenance. The cost of each proposed maintenance job should be estimated and the total estimated cost for all such jobs determined. All of these estimated requirements for supplies and maintenance items should be inserted in the budget and related to past expenditures.

A schedule must be prepared showing the bonds to be paid during the coming year, the deposits required in the sinking funds and the dates and amounts of interest payments due during the coming year. These items should also be inserted in the budget and related to the past expenditures.

If it is desirable to provide for capital outlays, that is, for new buildings, new equipment and purchase of land out of current revenues, these items should be scheduled for insertion in the budget. If such items are to be paid for from the proceeds of bond issues, they should in most cases be omitted from the school budget, which ordinarily relates to the receipts and expenditures of current funds.

Past expenditures and estimates of future expenditures set forth in the budget should be capable of being summarized in at least three ways.

First, it should be possible to relate the expenditures to the departments that are responsible for them. Only in this way can estimates be carefully prepared and expenditures controlled.

Second, it should be possible to summarize the expenditures according to the uniform classification of expenditures for functions as outlined by the U. S. Office of Education. This classification shows expenditures in relation to cost of instruction, cost of building operation, cost of building maintenance, cost of auxiliary and coordinate agencies, cost of fixed charges, cost of general control or administration, cost of debt service and cost of capital outlays from current revenues. This classification makes it possible to forecast estimated unit costs in advance. Desired readjustments can then be attempted.

Third, it should be possible to summarize budget expenditures as to whether they relate to salaries and wages or to materials, supplies and sundry expenses. This is desirable because if the costs of salaries or wages are known the effect of an increase or decrease in salaries or wages can readily be determined. If the amount for materials, supplies and expenses is shown separately the effect of a general rise or fall in prices can more readily be estimated.

Anticipated items of revenue other than current taxes should be esti-

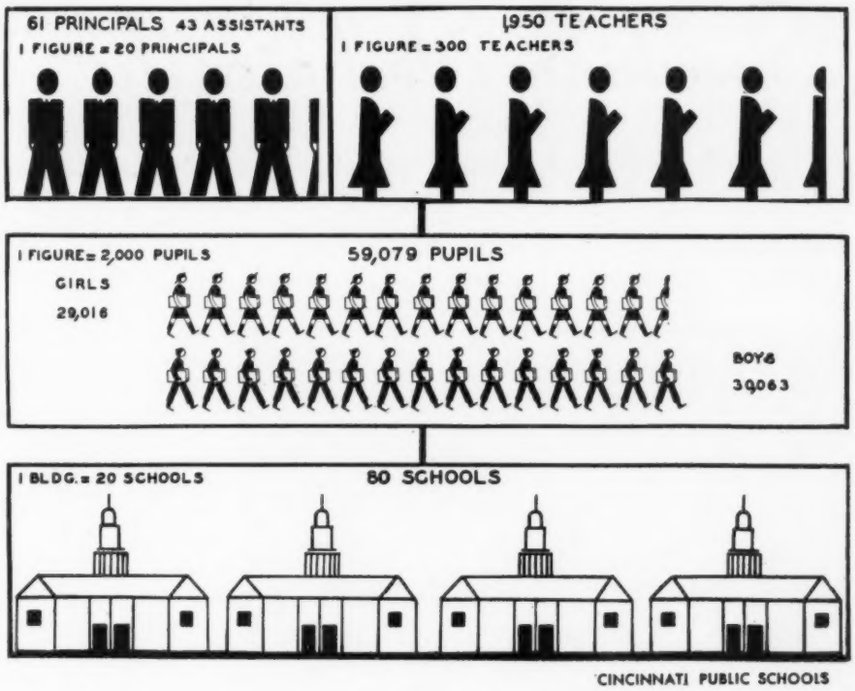
mated and listed in some suitable manner. Such items will include collections of delinquent taxes, income from tuition pupils, rent of properties, miscellaneous income and the amount to be received by the school district from the state. In most cases the state appropriation will be the largest item of income other than the income from taxes.

After the income items have been summarized and subtracted from the total revised and approved expenditure items, the difference will be the amount that it is necessary to obtain by the tax levy for the ensuing year.

When the tentative budget has been prepared, it should be presented to the board of public education or to the governing authority for its consideration and revision. The budget may be referred to a committee for detailed study. This committee will proceed with a careful consideration of the budget, hear explanations of department heads, receive and consider communications relating to the budget from any interested persons and, if deemed desirable, arrange for special public meetings relating to matters contained in the budget.

When the committee has completed its study of the budget and after it has made revisions, it should recommend the adoption of the budget and the fixing of a tax rate that will make the estimated revenues equal to or balance with the estimated expenditures. The governing authority should then pass a resolution adopting the budget and fixing the tax levy for the ensuing fiscal year. In fixing this tax levy, any legal restrictions upon the amount of the tax levy must be complied with.

Many times the adoption of the budget does not of itself authorize the expenditures provided for in the budget. In such instances all proposed expenditures, except those for minor routine items, must again come before the governing body for further consideration and for authorization. These items would be brought up at various times throughout the year when the expenditures would be about to be incurred. Otherwise, the adoption of the budget gives almost complete power to proceed with the expenditures without further authorization.



CINCINNATI PUBLIC SCHOOLS

In either event, after the adoption of the budget and after the beginning of the fiscal year to which the budget applies, the actual operations must be watched to see that they conform to the budget plan. If for a special reason a variation is desirable, the matter should be brought before the governing body for proper authorization.

It is in connection with the operation of the budget that the accounting system of the board of public education can be of much service. This must be such as to show on the books all of the appropriations made by the board, to show the expenditures made under each appropriation and the unexpended balance of the appropriation. This means that the accounting classification of expenditures and the budget classification of expenditures must be identical.

At the beginning of the period, accounts with the main sources of revenue will be debited with estimated amounts to be received and the operating surplus account will be credited. In like manner, accounts will be maintained in the general ledger for the major classes of expenditures. These accounts will be credited with the original appropriations and the operating surplus account will be debited.

During the budget period, actual receipts and expenses will be recorded in these major accounts and at the end of the period these accounts will have their balances closed into the operating surplus account, thus revealing the operating surplus or deficit for the year. These major income and expenditure accounts will, likewise, serve as controlling accounts for subsidiary records.

Whenever considered necessary, accounts representing encumbrances against appropriations should be kept. However, in school accounting in which a large proportion of expenditures is for salaries and in which invoices are paid promptly, it is not always necessary to keep a complete set of accounts representing encumbrances against appropriations.

At regular intervals, statements should be presented to the board of public education showing the amounts appropriated, the amounts expended and the balances in the appropriations. The same applies to income.

The preparation and operation of a budget make for real economy because all expenditures are thought about in advance and are considered as to their relative value. The adoption of a budget sets a standard of operation. The desire should be to make the tax rate as low as possible consistent with adequate schools. Schools must be adequate because children cannot usually make up in later life for opportunities deprived them during school age.

Speaking Technically

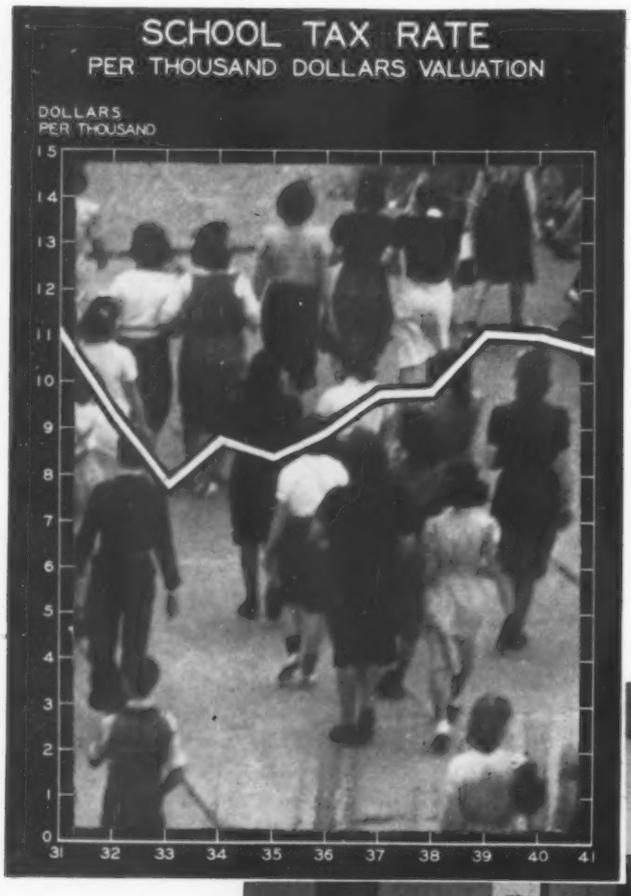
THE WRONG START:
THE RIGHT START:

THE technical budget is the most important single tool at the disposal of the executive in the effective management of the educational enterprise. It enables the executive to control and to coordinate the myriad phases of a school system.

There has been much criticism recently of the mechanical aspects of school administration on the ground that school superintendents tend to become engrossed in the manipulation of technics with resulting failure to give constructive social and professional leadership in community and school. The implication seems to be that the superintendent must choose between being a technician or a statesman. This is to set up a purely fictitious dichotomy. These two are not alternative but complementary.

There is no reason to expect that decreasing emphasis on technic will increase the opportunities of exercising leadership. The problem is not that simple. In fact, it is more likely that proper organization of technic will create more opportunities for leadership and, in the long run, will release more time and energy to capitalize on such opportunities.

Properly conceived, the technical or working budget becomes a major facilitating device in developing, reorganizing and maintaining the instructional program. It translates into fiscal terms the instructional require-



If, during 1930-35, the emphasis in budget making had been put squarely where it belonged—on the educational program, the impact of the depression on the schools would have been greatly cushioned and many stupid curtailments would have been avoided. Left: A well-executed graph from the yearly budget propaganda of Rochester, N. Y. Below: A busy office around budget time in the school system of New Britain, Conn.

How Much Money Is There to Spend? What Do We Propose to Accomplish?

E. T. PETERSON
University of Iowa

ments of the program to which a school system is committed. It systematizes these requirements by anticipating in high detail the cost of all necessary services, both personal and nonpersonal, and by demonstrating that sufficient revenue is available to meet these costs.

A serious obstacle to the formulation of this type of budget has been the widespread emphasis on income as the point of departure. Too many budgets start with some person's idea of how much money should be spent on the enterprise and never get farther than a sketchy allocation of this sum to the various services. Such an approach results in a schedule of proposed expenditures, not a planned budget. It misses the central point of balancing expenditures in terms of activities. It starts with money and ends with money and the program of activities never quite gets into the picture.

The technical budget does not start with money, but with activities. It originates in a review and appraisal of the basic policies of the school system and the implementation of these policies by means of the specific activities that carry them into effect. Instead of first asking how much money there is to spend next year, the question shifts to what it is proposed to accomplish next year. The center of initial focus is continuation, modification, expansion or discard of basic policy and program. If new activities are to be undertaken or existing activities substantially modified, consideration should first be given to educational and social rather than to the fiscal desirability.

That this does not mean evasion of financial responsibility or commitment to blind extravagance is indicated by the second step in the process, which is careful translation of the proposed program of activities into cost. This cost analysis must include all factors, immediate as well as terminal, segregated into personnel, physical plant, equipment, materials, supplies and services necessary to achieve the program.

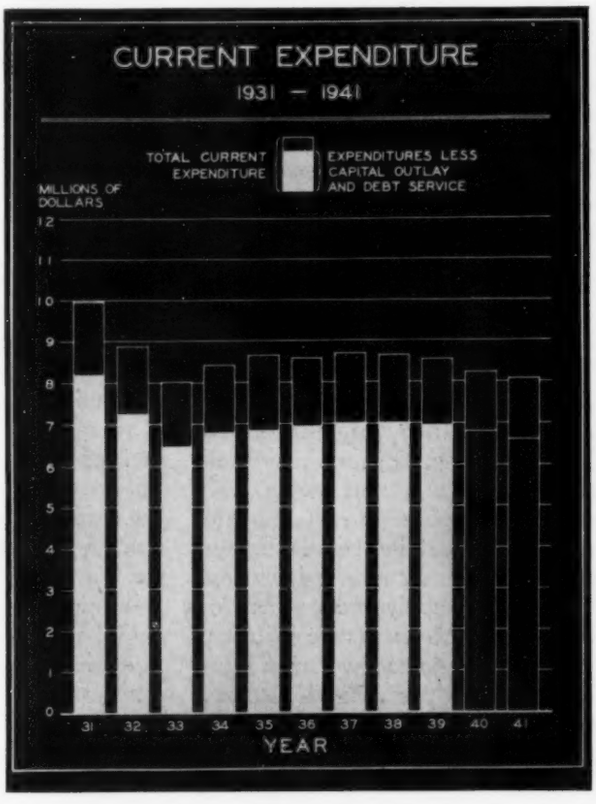
The accounting system and other records of past experience furnish the basis for much of this cost estimation. Some of it stems from established and continuing policies with respect to salary schedules, textbook adoptions, standard supply and equipment lists, general stores and inventories, quotations and bids, procurement practices, debt service schedules and plant operation and maintenance. A close knowledge of market trends is helpful. Errors in prediction can be reduced to narrow margins when they grow out of experience and judgment resting upon an accurate factual foundation.

The third step involves reconciliation of the proposed expenditure program with anticipated income or with financial ability and resources that might permit income increases.

If, in this process of relating proposed expenditure to possible income, it is decided that the program cannot be financed and that reductions are necessary, these reductions should not be made in terms of money but directly in terms of reduced or modified activities. In place of deciding that the budget askings must be reduced by X dollars, the reductions should take the form of specific modifications in X activities. This places the emphasis squarely where it belongs—on the educational program. It forces consideration of each individual adjustment in relation to the total school pattern. It insists on balance and perspective in the give and take of compromises. If such an approach had been dominant in budgetary hearings and decisions in the period 1930-35, the impact of the depression on the public schools would have been greatly cushioned and stupid eliminations avoided.

Out of this process of adjustment between what is desired educationally and what is possible financially, the countless decisions accumulate, out of which the balanced budget is finally compounded. The remainder of this discussion is concerned with the application of these principles of procedure to the mechanics of the technical budget with special reference to form.

The most important single characteristic is detail. A budget conceived in these terms must be set



The problem of budget making is one of effective organization of detail, so as to prevent the budget document from becoming unwieldy and cumbersome. It is good practice to break the document into sections, each complete in itself but introducing successive levels of breakdown involving increasing analysis and greater detail. Right: Another graph from the Rochester report giving a ten year survey of the current expenditures.

forth in complete detail. A lump sum budget or one involving estimates by funds or by a few major divisions becomes essentially meaningless. It is impossible to introduce too much detail into the total procedure. The problem is one of effective organization of detail, so as to prevent the budget document from becoming unwieldy and cumbersome.

Beware of This Common Error

The commonest mistake is to attempt to introduce a maximum of detail into each of the major character or functional divisions. For example, current expense is broken down into general control, instruction, coordinate activities, auxiliary agencies, fixed charges, operation of plant and maintenance of plant. Each of these major divisions is, in turn, broken down into its standard subdivisions or subactivities. Each subactivity is broken down into personal service and nonpersonal or materials service; each of these, in turn, into its constituent elements of individuals employed and specific materials, supplies or equipment requested.

When the essential supporting data and comparisons for each individual item are incorporated, it is clear that the resulting document becomes so involved as to interfere seriously with its use and interpretation.

It is far better practice to break up the budget document into sections, each being complete in itself but introducing successive levels of breakdown involving increasingly finer analysis and greater detail. This form of presentation in a sense reverses the sequence employed in building the budget. The latter begins with individual decisions, which are gradually accumulated into subdivisional and divisional totals. These totals are end products, not points of departure. In the preferred form of presentation, however, the first section is devoted to a general summary and the succeeding sections introduce progressively greater detail until the individual component decisions are set forth with accompanying explanation and justification.

The expenditure program should be presented in at least three sections: general summary by major divisions, analysis by subdivisions or subactivities and detailed analysis by personal and nonpersonal service. Then follow the income analysis and balance statement, making five sections of the entire budget document.

The first section is introduced by a narrative statement summarizing the more important factors that have conditioned the basic decisions. This brief statement should give an overview of the discussions that preceded the final statements of needs and requests. It indicates the more important issues involved and summarizes background data, such as growth trends, departures from established policies, new undertakings and expansion of existing services. This is followed by a general summary of the budget requests, first, by current expense, capital outlay and debt service and, then, by major character divisions, such as general control. A brief statement of anticipated income is included.

The second section is given over to the second level of breakdown by subactivities. Each of the major activity accounts is broken down into its constituent items according to standard expenditure classification. For each item, a statement of policy is given, with explanations for departures therefrom and justifications for increases or decreases.

The third section is dedicated to a detailed analysis of all requests. For at least the first five major character divisions, the most defensible basis of analysis is by personal and nonpersonal service. For these five, the analysis starts with personal service and sets up the detailed requests by individual salaries and payments under each major activity. The same is then done for nonpersonal service, setting up the detailed and itemized requests for materials and supplies.

It seems more logical to consolidate the analysis first of personal service requests and then nonpersonal, since budgetary discussions of these details tend to concentrate on the establishment and application of policies for salary determination of all employes on the one hand and of policies associated with supply procurement on the other. The alternative is to start with each major activity and introduce the analysis of both personal and nonpersonal services under each.

The remaining major activity divisions do not lend themselves to analysis by personal and nonpersonal service. The detailed analysis of maintenance of plant is best set forth by buildings with a distribution of proposed repairs and replacements under each building. The same is true of capital outlay. The type of detail introduced under fixed charges and debt service is a function of the inherent nature of each of these activities and the breakdown should be appropriate to each.

The fourth section analyzes anticipated income by each individual source, both as to governmental unit from which it is received and as to type of tax or income from sources other than taxation. The concluding section summarizes the anticipated fiscal transactions for the fiscal period by drawing up a balance sheet of receipts and expenditures, with statements of balances on hand at both the beginning and the end of the fiscal period. Its function is to demonstrate that the proposed budget is in balance.

Why It Works Well

Such a differentiated form of budget presentation is flexible in its uses. It permits maximum adaptability to the interests and requirements of different groups associated with budgetary procedure. Each section is complete in itself and serves distinct purposes. Certain groups are interested only in summarizations. They have neither time nor inclination to concern themselves with details. For such, the general summary suffices. For others increasing attention to detail is important. Their needs are met in the second and third levels of breakdown. Still others wish to analyze each major activity from summary to complete detail. They will be concerned with the entire budget document.

Many technical considerations are omitted in this discussion, the most important of which is integration of the budget and the accounting system. Attention has been focused on the form of the budget document. Education is facing another critical period when the resources of professional leadership will be taxed to the limit to protect school programs against radical curtailment. One important means of protection is a strengthened budgetary procedure.

Public Hearings? Yes

HUBERT W. STONE

Director, Bureau of Finance, Department of Education
Connecticut

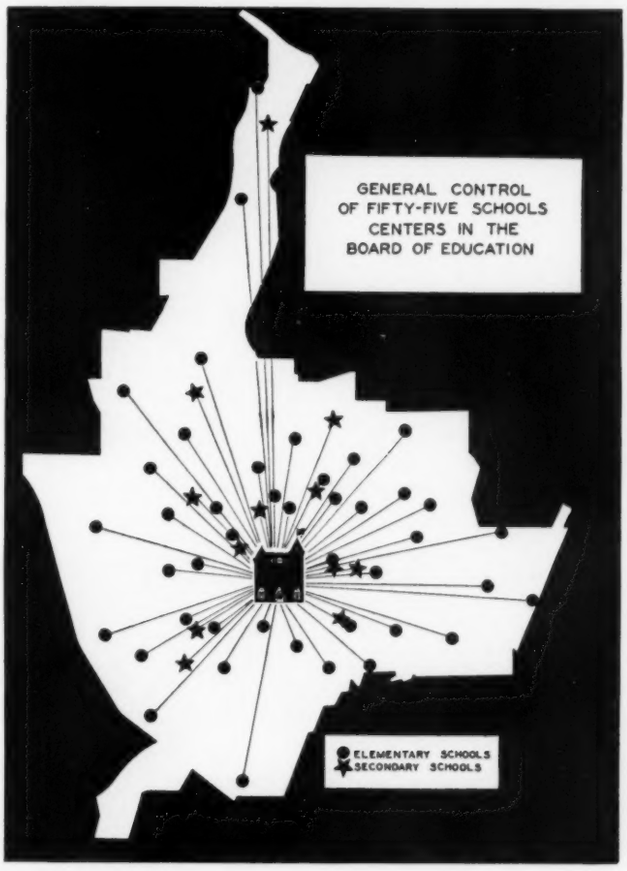
THE public hearing on the budget is that stage in the budgetary process at which those persons who must pay the bill, the well-informed taxpayer, the civic-minded resident, the crackpot and the congenital "aginner," are privileged to have their say.

Are open hearings essential? Do they serve any useful purpose?

To answer these questions fully would require a treatise on our democratic form of government. A person's right to participate in the process by which tax money is extracted from his pocket is one of the fundamentals of our governmental system. In the case of the federal government this participation is indirect, exercised through duly elected representatives or, perhaps, through paid lobbyists. In the case of the states the same condition prevails though there have been frequent instances during the recent session of the general assembly of our state when citizens appeared before the committee on appropriations and presented their views concerning items in the budget in which they were particularly interested.

The place in which individuals can make their views, opinions and influence most effective in guiding the financial destiny of government is on the local level. With the necessity for centralizing authority at the federal level to meet the exigencies of the present "unlimited emergency," it is essential that we hold on to and vitalize every means of encouraging citizen participation in government lest we lose our capacity for self-government. Public hearings on the budget, whether general municipal or school, represent a sector that must be staunchily defended.

But the critics or cynics say: "You don't vest any authority in the citizens who appear at a budget hearing to determine finally what the amount of the annual appropriation shall be."



This inverted silhouette of a headless clown is also a silhouette of the school district of Rochester, N. Y., showing 55 school centers. Through lively, readable descriptions of the program to be financed, the citizen is inspired to attend open hearings and to discuss projects intelligently.

To support this statement they could cite the following provision in the general bill, adopted by our 1941 assembly, which permits two or more adjacent towns in Connecticut to establish and maintain a regional high school: "The regional high school board shall, after such public hearing, hold an executive session at which it shall consider . . . any other matter brought to its attention [presumably by citizens attending the hearing] and shall thereupon prepare . . . a statement of the proposed expenditures" for publication.

Yes, the statement of the critics is true but it does not invalidate the arguments for the public hearing. Town, city and school officials are chosen by the people with the knowledge that these officials are responsible for the competent management of local affairs. Dereliction in the discharge of this responsibility can be corrected by replacing the offenders. After all, a nice balance has to be struck between the duties and functions of the officeholder and the responsibility of the taxpayer for seeing to it that taxes are levied to carry on only essential governmental services, are wisely expended and are adequately accounted for. The most important function of the public budget hearing is to provide a channel through which the citizen can make his views known.

It must be conceded that frequently these views are of little value, that they are the product of prejudice and bias rather than of information, that they are sometimes dictated by a personal, penny pinching philosophy rather than a regard for the general good and that citizen participation of this sort slows up the adoption of the financial program.

However, these disadvantages are far outweighed by the following advantages: (1) open hearings can be, have often been, productive of valuable suggestions for the solution of troublesome problems; (2) the need

for presenting a comprehensive financial program has a salutary effect on all governing bodies, this being the means by which light can be let into otherwise obscure corners, and (3) open hearings preserve one of the vital elements in democracy, the active participation of the citizen in self-government.

To ensure the effective participation of the taxpayer in this serious business of making our democratic form of government work, certain rules must be observed. It sometimes happens that the public official, having lost sight of his position as servant, aspires to the rôle of master and fights every move to subject the town's or the school's business to public scrutiny. One of his devices is to fail to give adequate notice of public hearings on any matter, including the budget. In the regional high school law of our state it is required that during the second week in March preceding the school year which begins the following July the board shall hold a public hearing on the budget, "notice of which shall be conspicuously posted at least ten days prior to such meeting."

Not only must the citizen be given ample notice of the public meeting so that he can arrange his personal calendar so as to be present, but the rules require that he be given information of the sort that will enable him to form sound judgment. Much of the ignorance, lack of appreciation of the problems involved, personal bias and prejudice that have characterized local public hearings at which I was an official participant for ten years had its basis (1) in the failure of the town officials to make adequate financial information available to the general public; (2) when this condition was corrected, the attitude of the citizens who held, erroneously, the view, "What can we do? The cards are stacked against us anyhow," and (3) the opportunity that this attitude afforded to let the noisy minority with axes to grind have too much to say.

With these disturbing possibilities in mind our regional high school act provides: "At the time of posting the notice of said public hearing the regional high school board shall make available to any elector in the regional high school district, at the administrative office of such board, copies of the proposed budget," which must include:

1. A statement of the educational program to be provided.
2. A statement by classification (the uniform N.E.A. classification) of all expenditures, if any, during the current school year.
3. A statement, in a parallel column, of the estimated expenditures to carry out the educational program during the ensuing year.
4. The estimated per pupil expenditures for the ensuing year.
5. Such other information as, in the opinion of the regional high school board, will contribute to the intelligent consideration of the budget.

It often happens that the lack of interest as reflected by poor attendance at the public hearing is only apparent, not real. The desire to participate, to help local officials and school men in providing economical and adequate public services, is there but it has no facts on which to feed.

By "facts" I mean a lively, readable description of the program to be financed by the monies appropriated, a conversion of the dollars spent last year, those being spent this and the ones to be spent next into objectives attained, improvements made, further expansion and betterment proposed, such as more frequent health examinations and a better student health record, a well-paid, competent teaching staff and higher scholastic achievement on the part of the pupils or a new wing on the building providing room for a shop in which to give basic training to our future building tradesmen, electricians, engineers and mechanics.

Given adequate notice of the hearing, comprehensive yet concise budgetary information illustrated by graphic presentation and supplemented by narrative material, the citizen's interest is excited and the government in which he participates and the citizen himself are improved.

Great care must be exercised to ensure that this interest, once aroused, is not allowed to wither and die. Perhaps, it is too much to expect that one hearty budgetary meal will last the citizen for a whole year. While this discussion does not include the matter of public reporting, I wish to emphasize the need for periodic statements not limited to tabular presentation of the original amounts appropriated, the amount spent to date and the balance on hand, but a readable account of the execution of the educational program

The place to implant standards of civic responsibility is in the schools.

Well-chosen photographs help to state the budget message in terms of student participation and community benefit as well as dollars and cents.

in terms of student participation and community benefit as well as dollars.

Such reports are a necessary element in the cultivation of general, well-informed interest so essential to a worth-while public hearing on the budget. This is an educational process the application of which should present to the educators, of all people, no serious problem!

The foregoing observations have been directed toward the "why" and the "how" of public hearings on the budget with a view to enlisting more and better participation by those now eligible to take part. What about those future citizens in our schools, those in whom we now have the opportunity to inculcate a sense of civic responsibility? What training are we giving them in preparation for this responsibility?

Nearly two years ago Harry S. Ganders, dean of the school of education at Syracuse University, made an address at one of the meetings of the New York School Boards Association which was carried as an article in the February 1940 issue of the association's publication. The title of the article was "Effective Civic Education for Democracy."

Speaking of some boards of education, school administrators and faculties Dean Ganders said: "They would have the school concern itself only with recitations on the form of American government instead of virile investigation of its functions and honest consideration of its true spirit. We do not teach how to participate in government." Further on, he added: "We need to remind our would-be dictators of school policy that 70 years ago government was effectively taught in town meetings and country stores, geography was learned through exploration of lands, not books, and economic production was accomplished on father's farm." He then arrived at this conclusion: "The reuniting of learning and real participation now constitutes the major problem of all education and, particularly, training for citizenship."

This is a special challenge to the teachers of history, economics and civics. When the local budget is in the process of preparation, which more often than not is during the period when school is in session, what effort is made to inform the students, our future citizens, about the elements of the financial plan, the work involved in its preparation, the necessity for reconciling the demands of competing governmental agencies and services for the biggest slice of the taxpayer's dollar, the services the plan is designed to finance, the effect of its economical or inefficient execution on the welfare of the community and the cost of the program to the student's parents whether rent payers or property owners?

The place to implant and to nourish high standards of civic responsibility is in the schools and, under competent guidance, this may be accomplished. Free public education will then fulfill more adequately the purpose for which it was established, the production of a competent citizenry able to function not only as true public servants, day-to-day administrators, but also as intelligent voters and effective participants in the process of self-government.

Set-Up for the Rural School

ROBERT E. SCOTT
Superintendent of Schools, Hennepin County, Minnesota

BUDGETS for rural schools are prepared by the rural school board and are then submitted to the voters for their acceptance. Usually, they are haphazard and exist for immediate demands only. Whatever items are absolutely necessary to maintain the school and whatever salary must be paid to the teacher govern the amount.

More careful thought should be given to the rural school budget. County superintendents should prepare and present to boards suggestive budgets that can be used in arriving at a more uniform financial system. Oftentimes bills, such as for insurance, fall due every third or fifth year and have a tendency to increase the amount for that year to an abnormal degree. The best procedure in such instances would be to budget the insurance premiums on a yearly basis.

In setting up a budget, the most acceptable method is to decide what services the schools are expected to render and then to provide accordingly. Certain activities should be put down as basic necessities for an up-to-date school. These include such equipment as globes, maps, a set of encyclopedias, up-to-date dictionaries (one for each pupil in the larger class), modern texts (not over 10 years of age), a filing cabinet for record cards and another letter-sized file for supplementary material.

Health and sanitation should be carefully considered. A slant-stream bubbling fountain should be provided; also, modern flush water closets or septic tanks, facilities for handwashing and a well that is safe from surface contamination.

Visual education is so important today that boards of education should consider such items as film-strip projectors, the purchase or rental of sound and silent moving pictures and the usual visual education equipment of maps, charts and photographs. In Hennepin County two film-strip projectors are circulated around the county to the rural schools. Educational movies on a sound projector are shown monthly to the more progressive schools. These films, of which a great number can now be obtained, consist of two science reels, two historical reels, one travel reel and one comedy reel. This program has been very successful and the school boards are placing the cost of this visual education in their budgets. If a school board is awake to the needs of the growing child, it provides an opportunity for enlarged experiences by means of excursions and trips. Many of these are undertaken by progressive teachers with little cost to the board; however, it would appear that boards should include a small amount in the budget for some trips.

Rural school budgets should provide qualified teachers and good equipment.

In Hennepin County the trips by the rural schools have included: (1) a dairy farm; (2) a greenhouse, vegetable and fruit farm; (3) creameries; (4) a post office; (5) factories; (6) the wood lot, creek and meadow; (7) the circus; (8) a radio station; (9) an airport; (10) the museum and library; (11) the historical society museum; (12) an office of the United States Weather Bureau; (13) the telephone company's offices; (14) flour mills, and (15) a bank.

More and more the idea of transportation paid by the district is coming into vogue, particularly the transportation of nonresident high school pupils from the farm to the village high school. Some boards in the larger suburban communities are finding it worth while to purchase their own buses to transport the children. In the smaller communities young farmers are hired to transport children of the neighborhood to the village high school.

We find that if a rural school board is willing to spend a reasonable amount of money for a qualified teacher with at least two years of training and if it provides nine months of school in a building

Budgets of Three One-Room Rural Schools and an Ideal Budget

	Dist. 35	Dist. 54	Dist. 93	IDEAL
1. General Control	$ 60.00	$ 64.00	$ 105.00	$ 60.00[1]
2. Instruction				
Teachers' Salaries	900.00	1050.00	1030.00	1035.00
Textbooks (free)	36.00	21.00	65.00	80.00
Library Books	15.00	24.00	20.00	25.00
Supplies	46.00	50.00	130.00	85.00
Other Expenses of Instruction (Tuition)	15.00	5.00	35.00	55.00[2]
3. Operation				
Janitors' Salaries	75.00	60.00	300.00	125.00[3]
Fuel	60.00	120.00	135.00	150.00
Other Supplies	5.00	25.00	140.00	35.00
4. Maintenance				
Repair of Buildings, Upkeep of Grounds	40.00	150.00	320.00	100.00
Repair of Equipment	10.00	0.00	50.00	20.00
5. Auxiliary Agencies				
Transportation of Pupils	195.00	0.00	200.00	250.00[4]
Promotion of Health	5.00	0.00	0.00	35.00[5]
Other Expenses	0.00	0.00	85.00	25.00[6]
6. Fixed Charges				
Insurance	47.00	20.00	50.00	45.00[7]
Rent, Interest on Orders, etc.	0.00	0.00	0.00	0.00
TOTAL MAINTENANCE	**$1509.00**	**$1589.00**	**$2665.00**	**$2125.00**
7. Capital Outlay				
Land, Improvements of Grounds, Buildings	100.00	0.00	360.00	50.00[8]
New Equipment	0.00	25.00	160.00	75.00[9]
8. Debt Service				
Interest	0.00	3.00	0.00	0.00
Bonds	0.00	370.00	0.00	0.00
9. Cash On Hand	575.00	400.00	550.00	250.00[10]
GRAND TOTAL	**$2184.00**	**$2387.00**	**$3735.00**	**$2500.00**

	Dist. 35	Dist. 54	Dist. 93
Average Number of Pupils	25	35	20
Assessed Valuation	$36,270.00	$63,000.00	$125,000.00
Millage Rate	19.3	19.2	12.2

These schools get state aid as follows: (considering a pupil population of 30)

Classification Aid	$ 80.00
Superior Rating	30.00
Income Tax Aid ($10 per pupil, ages 6 to 16)	300.00
Transportation Aid	30.00
Library Aid (50c per pupil)	10.00
TOTAL	**$450.00**

[1] Mostly board salaries; [2] includes sound-movies (monthly); [3] janitor's salary for five months; [4] transportation of ten high school pupils at $3 per month; [5] health clinic for entering pupils; [6] hot lunch (nearly self-supporting by small daily charge); [7] annual premium on fire, windstorm and compensation; [8] improving grounds with shrubs, trees, lawn and playground; [9] new maps, globes, chairs and desk; [10] cash reserve for emergencies.

equipped with modern conveniences and with up-to-date textbooks, workbooks and other teaching aids, the children turned out from this school —even though all eight grades are in one room—are not at a disadvantage when they go to high school; in fact, the old theory is still borne out that the rural child learns more, is a better student, is more of a leader and more industrious than the average city child.

The rural teacher also has a distinct advantage in the opportunities afforded her to specialize in individual differences, to teach the child instead of the textbooks and to bring out the latent possibilities in each individual. There is just as great a challenge in the rural school as there is in the city school and when school people and school boards provide sufficient money for the job of teaching in the rural communities we may consider the rural education on a level with the city systems.

At top of the page appear the actual budgets from three Hennepin County one room schools and also a budget for the ideal rural school.

Designed for Popular Appeal

JAMES M. SPINNING
Superintendent of Schools, Rochester, N. Y.

LET us assume at the start that we are talking about popular understanding of the school budget. To be on the safe side, let us assume, also, that we seek to create as favorable reaction as possible toward the budget request.

It may be that there should be two separate presentations, one complete and technical for the chamber of commerce, the tax league and the statisticians, and the other a swing version for the completely lay mind. For both groups we must realize that a budget is more than an estimate of receipts and expenditures.

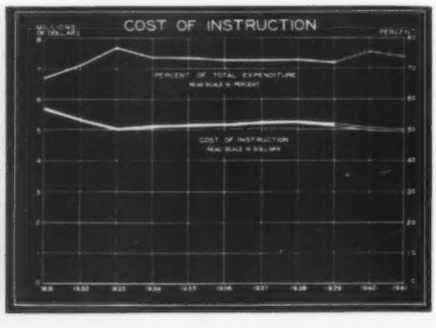
The budget is a purchase and investment proposal. A statement of the value of the goods and services to be supplied to the buyer is a legitimate part of the transaction and one which, in general, he appreciates. He may need more help in visualizing what his money buys than he can readily glean from the cold figures. Many school systems attempt to warm up the statistics to a reasonable degree by including with their annual budget publication both a complete analysis of educational expenditures and a brief, more or less illustrated account of the work of the schools.

In Rochester since 1928 the board of education at budget time each year has sent into the home of every pupil and to all interested citizens a budget statement and request of standard format. It compares enrollment, per pupil costs, tax rate, income and expenditure under the seven main divisions and 111 accounts for a five year (in some cases a ten year) period. From the outset each page has had its photograph, its table, its logarithmic scaled graphs and its explanation. Every statement has been as objective as we knew how to make it. The pamphlet started out with twelve 8½ by 11 inch pages and soon grew to 16. Each year major developments and needs of the schools have been briefly featured.

In 1936 there was added a superintendent's foreword of four pages illustrated with some indifferent photographs. The budget is now a 24 page pamphlet with 10 pages on the aims and product of the schools. The text is greatly improved because it is no longer written by the superintendent but by a staff committee, which decides on the theme. The photographs have been geared to the theme and the copy to the pictures.

The layout and the pictures have also improved because they have been committed to a teacher of commercial art, working with the director of visual education. The photographic pattern has been carried out also on the front and back covers. The graphs have been made more striking by the use of white on black and sometimes by superimposing them on appropriate photographs.

One year the title was "The School City," being a comparison of its needs and functions with those of the larger city. Last year it was "Devoted to Democracy" and this year, "Your Schools Defend Democracy." We have tried to make each picture tell a clear and direct story, but we have not hesitated to rub it in with captions. While many of the best shots have only one, two or three children in them, we deliberately include each year several photographs of large groups so that the



INSTRUCTION

The cost of instructional service and supplies for 1941 is $100,000 less than the amount allocated for 1940, and $120,000 less than the estimated expenditure for the current year. The total requested for 1941 is $4,970,000.

Decrease in instructional costs naturally follows decrease in enrolment more closely than does the cost of administration, operation, or other major items. The number of teachers in the Rochester schools has declined by more than five hundred in the past ten years, and it is still declining.

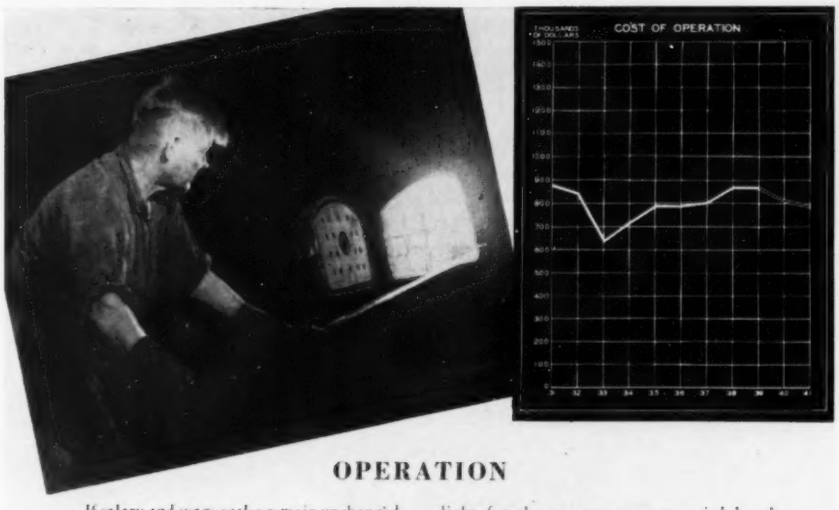
Quite properly, the chief current expenditure of the schools is for instruction. It approximates three-quarters of the total current expense. In ten years it has not once fallen below two-thirds of the total.

A glance at the tabulation at the foot of this page will enable you to note, among other trends, the increasing emphasis upon vocational education.

1937 ANALYSIS OF THE COST OF INSTRUCTION 1941

	1937	1938	1939	†1940	*1941
INSTRUCTION (Supervision and Teaching)	5,223,806.66	5,235,793.86	5,162,403.53	5,090,000.00	4,970,000.00
1. Educational Direction and Supervision	186,104.51	188,508.17	188,617.61	180,000.00	180,000.00
2. Elementary Schools	2,076,898.44	2,011,850.98	1,960,199.01	1,898,000.00	1,810,000.00
3. Secondary Schools	2,251,391.78	2,247,355.25	2,292,523.42	2,280,000.00	2,237,000.00
4. Teacher Training	23,180.00	13,615.00	16,435.15	15,000.00	15,000.00
5. Special Education (Schools and Classes)	273,599.73	273,018.75	236,568.14	200,000.00	198,000.00
6. Vocational Schools	266,062.85	287,659.05	322,081.21	365,000.00	395,000.00
7. Adult Education	103,904.06	117,836.60	116,898.70	130,000.00	115,000.00
8. Parent Education	8,852.56	10,788.02	11,261.71	11,000.00	10,000.00
9. Summer Schools	7,160.81	6,502.83	6,891.18	7,000.00	6,000.00
10. Survey and Curriculum Revision	25,719.55	17,532.79	10,927.40	4,000.00	4,000.00
11. Other Expenditures (W. P. A., etc.)	932.37	None	None (Included above)	None (Included above)	None (Included above)
12. Library Salaries and Supplies	‡	59,223.15			
13. Magazines and Periodicals	‡	1,903.27			

†Partially estimated.
*Budget.
‡Formerly charged to Auxiliary Services; costs now charged to schools.



OPERATION

If salary and wage scales remain unchanged, the cost of operating school buildings will fall only as buildings are closed or as standards of cleanliness, heating, and lighting are sacrificed. For 1941 the appropriation for operating employes is $20,000 less than the appropriation for 1940, but it has been necessary to increase the allotment for fuel by $10,000. Even this increase may prove inadequate. The total for operation is reduced only by $10,000.

Because vocational work requires more fuel and more current, the cost of heat, power, and light for the quarters now occupied by the Edison Technical and Industrial High School is greater than when they were occupied by Washington High School. The saving made by abandoning the quarters formerly rented for Edison appears as a reduction in rental costs under Fixed Charges.

Other new operation costs arise directly as the result of the all night adult program for intensive training in occupations essential to the national defense.

1937 ANALYSIS OF THE COST OF OPERATION 1941

Operation	1937	1938	1939	†1940	*1941
	870,620.80	870,660.75	867,808.76	810,000.00	790,000.00
1. Janitors and Other Employees	439,848.23	473,332.68	463,505.42	437,500.00	430,000.00
2. Janitors' Supplies	18,838.64	20,272.12	19,377.14	18,000.00	21,000.00
3. Fuel	141,003.50	164,077.98	173,437.22	155,000.00	145,000.00
4. Water	3,925.28	3,922.13	3,517.81	3,500.00	3,500.00
5. Light and Power (Gas and Electricity)	107,894.69	114,169.83	108,947.33	104,000.00	104,000.00
6. Telephone and Telegraph	32,739.97	33,863.94	33,477.61	30,000.00	30,000.00
7. Protection Service	28,404.60	29,191.98	28,148.36	25,000.00	24,000.00
8. Care of Grounds	2,570.42	4,316.47	4,066.38	3,000.00	3,000.00
9. Laundry and Dry Cleaning	759.24	874.68	809.97	500.00	500.00
10. Special Use of Buildings	2,440.06	2,548.11	6,561.61	6,500.00	5,000.00
11. Express and Freight	None	None	301.74	500.00	500.00
12. Print Shop	233.99	2,806.18	3,550.84	1,500.00	500.00
13. Storage and Trucking	21,962.18	21,284.65	22,107.33	25,000.00	23,000.00

†Partially estimated.
*Budget.

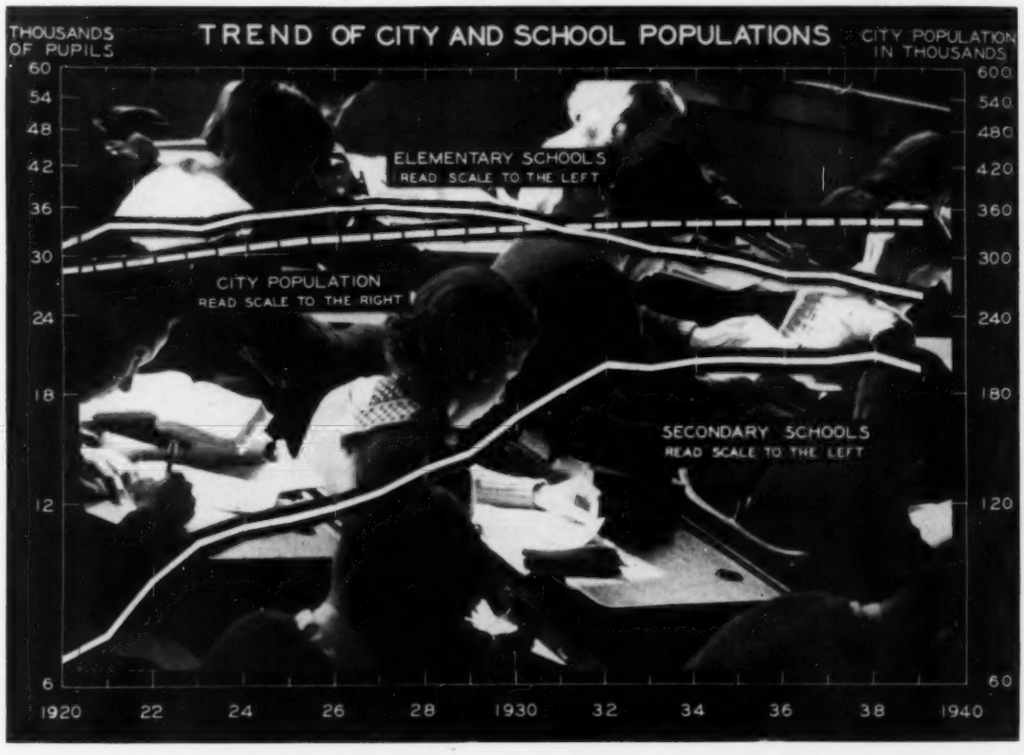
public will be mindful of the large numbers with which we deal.

On the whole, we are pleased over the achievement. In a number of cities it has won the compliment of imitation, frequently accompanied by improvement.

It is hard to judge the practical advantage of the budget publication. The public has come to expect it and we should be afraid to stop even if we wanted to. What happens to firms that stop advertising? Occasionally, someone murmurs at the supposed expense. But because 30,000 copies are printed this publication costs only a little more than 3 cents a copy. Business houses turning over far less than $8,000,000 a year would hardly balk at such an item in their public relations program.

With full statistical information so widely disseminated certainly no one can ever complain that any expenditures are concealed. When the pamphlets of 10 years are bound together the board and superintendent and anyone else who wishes to anatomize costs have the handiest sort of reference volume.

A generally similar format has been used for some years by Los Angeles and by Schenectady. The budget message in the Schenectady publication is always a marvel of clarity. Both of these cities have gone



To the home of every pupil in Rochester at budget time each year goes a pamphlet full of statistical information, tellingly displayed. Two pages from the 1940 budget publication are reproduced; these set forth information on instruction and operation. At the right is shown the interesting treatment given to graphs. The 1940 edition totaled 24 pages 8½ x 11 inches.

a step farther in "popularizing." They have broken up the tax dollar into pie charts and have supplemented the story with a "bill for one day of schooling for one child." Freeport, N. Y., has done the same this year in the handsome "Freeport Educational Review," in which the work of the schools is so well presented that the estimated budget as such requires only one of its 16 pages. Ithaca, N. Y., in the same general style but using typescript and a series of montages, has done a magnificent illustrated budget pamphlet printed by the offset process.

Perhaps we are wrong to concentrate so much of our school story at budget time. Even though the budget is adopted at one fell stroke, budget-making is more and more regarded as a continuous process. We might gain by attempting such a series as "Facts About the Public Schools of Baltimore," which presents in pictures and captions "How Reading Is Taught Today," "Music for Every Child," "Industrial Arts Education," "The Answers to Your Questions on Occupational Education" and similar topics. These are most attractive and convincing. A highly important member of the series gives the facts about size and growth, per pupil and per citizen costs, and compares them with costs in other cities. This city-with-city comparison is used interestingly also by Providence, R. I., in a "budget of justification."

Most cities, of course, reserve their artistic effects for the superintendent's annual report, which generally contains a financial statement. Everyone stands up to cheer for New York City's "All the Children," which so far beggars description that it will not be described here. For what excellent work of this kind is done in smaller cities, take a look at Madison's "Democracy—the Worth of the Individual," and another at "How Jersey City Schools Strengthen Democracy."

See how Grosse Pointe, Mich., has hewed to the *Life*-line in its high school publication, which presents the message of the American school as the administration must delight to see it presented. Monthly and bi-monthly administrative and staff bulletins in scores of cities are continuous, indirect budget messages.

Among recent publications are three school reports with new and interesting angles. Seattle tells a "Decade of School History, 1930-1940." Much happened during that period in America and in the Seattle schools. That span of time shows distinct trends, ably pointed up by charts, diagrams and pictographs. Progress as well as change is evident.

Another recent treatment is "Your Cincinnati Schools, 1938-40," a 40 page booklet in which each of the seven chapters shows progress over a three year period toward the goals set up in a school survey.

Pittsburgh has taken the publication of the 2700 page Strayer survey as the occasion for printing (in a school shop) an illustrated abstract for popular distribution, a supremely intelligent and high-minded piece of strategy. So fine has been the candor of the administration in this work that the surveyor considers that there has been "overemphasis on our constructive criticism in proportion to our favorable comments." The net effect, nevertheless, cannot do other than build the strongest sort of confidence in the Pittsburgh schools.

Building popular confidence is the best way to build a popular budget.

Typical of the forceful illustrations used in the Rochester report.

Financing Our Schools

FRANK W. HUBBARD and LOUISE B. SEASE

Director of Research and Research Assistant, Respectively
Research Division, National Education Association

PROFOUND changes have occurred during the last ten years in the picture of government spending. The period was one of financial emergency in which lack of taxpaying ability in many of our local governmental units forced state governments to assume an increased share of the cost of functions formerly considered wholly or partly local. A falling national income created new problems of unemployment, insecurity in old age and reduced living standards and caused the states, following the lead of the federal government, to enter new fields of public assistance, public health and public welfare. In other words, while there may have been a decline in the expenditures of local governments, the period from 1930 to 1940 was one of expansion in state activity and state spending.

Friends of public education began to ask how the schools fared in the midst of the general expansion of state governmental operations. Did education as a function of state government hold its own or lose ground in relation to other state functions?

A bulletin[1] recently issued by the research division of the National Education Association indicates that not only did the total cost of state government rise during the 1930-1940 decade but the states generally were spending more for educational purposes at the end of that period than at its beginning. The proportion of total state costs represented by state elementary and secondary school expenditures, however, declined during those years in more than half the 42 states for which figures were obtained. The decline was greatest among the states of the northeastern and northwestern sections of the country, those regions possessing high economic resources. The poorer states of the southern agricultural regions showed a tendency to increase the percentage of their total expenditures that was devoted to state public school support.

[1]School Costs and State Expenditures, 1930-1939. Research Bulletin **19:** 99 (May) 1941.

At first thought, it seems strange that it was in the states of greatest wealth that the schools lost the most ground financially, in comparison with other state functions. One possible explanation is that the states of greater wealth were in a better position to expand into new fields and to provide new types of social services than were the poorer states, many of which were desperate, economically speaking, in the early years of the 1930-1940 decade. Furthermore, it was in the rich, highly industrialized and highly urbanized states that the need for new types of social services was especially acute.

Another possible explanation is that in the poorer states the breakdown of the property tax during the depression years was most keenly felt, with the resulting failure of local school revenues. In some states, Arkansas and Alabama, for instance, in order to keep the schools open during the legal minimum school term it was necessary for the state government to come to the rescue with additional aid.

A national economic emergency of an inflationary kind faces us. Warning can be drawn from this review of the deflationary decade just completed

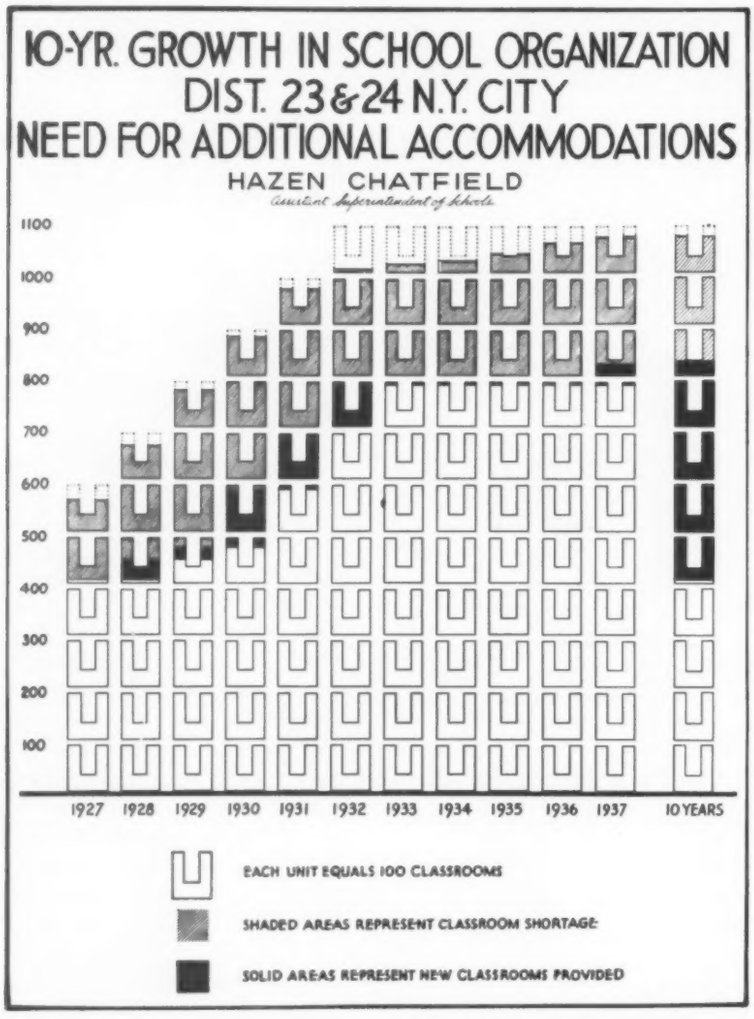
Much the same situation obtained in some of the industrialized northern states in which the local governments were laboring under restrictions imposed upon them by property tax limitation laws. In these states the local governments were unable to increase their tax rates to the point necessary to provide the same amount of revenues formerly obtained from the application of lower rates before the deflation in property valuations. It was necessary, therefore, for state governments to assume a larger share of the cost of the schools.

Examples of such states are Ohio and West Virginia. The schools did not gain from the transfer of their source of support from the local governments to the state, unless state aid was provided in excess of the sums formerly received from local sources.

The decade 1930-1940 was characterized by a rise in federal as well as in state expenditures. Payments of federal aid for public education increased fairly sharply between the beginning and middle years of the 1930-1940 decade and were considerably higher in 1938 and 1939 than in 1930. In no year, however, did they constitute a substantial proportion of total state payments for education. The influence exerted by federal aid payments on trends of state school expenditures during that period was apparently not important.

The actual amounts of highway expenditures, like those for schools, were generally higher at the close than at the beginning of the 1930-1940 period, but they suffered an even greater reduction in the proportion that they represented of total expenditures in most of the states. This does not mean that highways accounted for a smaller part than schools of the total cost of state government. On the contrary, even in 1938 after most of this reduction had taken place all except four of the states studied spent a larger proportion of their total state expenditures for highways than for elementary and secondary schools. Highways, like schools, lost less ground financially, in comparison with other state functions, in the poorer than in the wealthier states.

Payments for relief increased in the years between 1930 and 1940 not only in the actual amounts spent but, in contrast to highway expenditures, in the percentage of total state expenditures devoted to that purpose. Relief expenditures increased



Clean-cut, easily interpreted graphs, like this one from the Bronx annual report, have genuine value in acquainting the public with school needs.

sharply between the early and middle years of the 1930-1940 decade, particularly for purposes of noninstitutional relief. In this field of expenditure the federal government led the way. After the middle years of the decade federal aid to the states for relief dropped off somewhat while state relief expenditures generally continued to increase, although in many states not sufficiently to balance federal funds withdrawn.

States increasing the proportion of their relief expenditures most were, generally speaking, those states of high per capita income and wealth. This group includes many of the highly urbanized and industrialized northeastern and middle states in which relief and other social problems were particularly pressing during the 1930-1940 decade. This trend was in direct contrast to trends in the ratios of school and highway expenditures to total state expenditures.

In brief, school and highway expenditures failed to keep pace with the growth of state government costs between 1930 and 1940, while relief expenditures increased at a much faster rate. Relief expenditures were a principal, if not the primary, factor in the rise of state spending during that period. Practically all the increase in relief costs occurred in fields of noninstitutional relief in which the federal government took the initial steps. In other words, a large part of this increase in state spending was devoted to the support of functions that had their roots in the then existing emergency.

We are now faced with a national emergency of a different kind, different in that it is inflationary rather than deflationary in its economic aspects; marked by a rising national income, increased production and higher wages, in place of a falling national income, curtailed production and unemployment. Even more than the emergency that existed between 1930 and 1940, however, it will be characterized by increases in public spending.

There are a lesson and a warning to be drawn from the trends of state expenditures during the previous emergency. The fact that relief expenditures showed a tendency to increase more in those areas in which the proportionate expenditures for schools suffered the greatest reduction suggests that the expansion of state activities into new fields was accomplished at the cost of limiting the normal expansion of programs of "old line" state functions.

Assuming an equitable distribution of the tax burden throughout the nation, this limitation of "old line" services was hardly necessary. The American people are estimated to have spent $7,500,000 on goods and services of a luxury or nonessential nature in 1938. Evidently the total federal, state and local tax burden was not so heavy in that year as to result in a curtailment of private spending or in a reduction of standards of living. It is hard to believe that people who in 1938 were spending more than $1 out of every $10 for liquor, tobacco, amusements, soft drinks and personal beautification were having to deny themselves comforts because of the burden of taxation.

The tax burden of 1938 will seem light in comparison with that which we shall have to bear in the years to come. The American people should aim at an equitable adjustment of that tax burden instead of crippling one set of services in order to expand another. Good schools are basic to national defense and must be supported adequately.

The government is calling upon the people to bend all their energies toward increasing our production to more than match the output of the totalitarian governments of Europe. Success in this effort, however, will be an empty one if, in our enthusiasm in expanding production, we neglect the education of future generations of producers or fail to keep up morale and public understanding.

A Workshop in Democracy

E. T. McSWAIN

Associate Professor of Education, Northwestern University

DEMOCRACY as a cherished American ideal finds its meaning and value in the thought and action of each citizen. Many persons express lip-service to the democratic ideal. Unfortunately, too few citizens take democracy seriously enough to apply its principles in their daily association with others. Democracy is neither an achieved social pattern nor an established form of government. Basically, it is a philosophy of personal development and social participation, practiced and evaluated in daily living. Continuous vigilance must be exercised if democracy is to be protected from the subtle effects of ignorance, complacency and laissez-faire citizenship.

Fundamentally, democracy is not a form of government or a fixed pattern of society. It represents a philosophy of human values applied in social relationships. In brief, democracy is a way of living with others. The salient values inherent in the American way are: (1) respect for the worth and dignity of each person, child and adult; (2) equality of opportunity for personal development and social participation; (3) freedom of expression and assembly; (4) mutual interdependence of the welfare of individuals and the welfare of all citizens, and (5) government by the consent of the governed.

The preservation of the democratic ideal is dependent upon an intelligent citizenry. Our Army and Navy can defend the opportunity to work for democracy. Education as a social institution is the only means to build and to extend American democracy. The implications for public education are clear and imperative.

The unique function of the school in a democracy is to help boys and girls learn, through meaningful experiences, the values and procedures in the democratic way of life.

The major objectives of education are: growth and improvement in personality of each child; development of desirable social values and social attitudes; application of democratic cooperation and social intelligence, and worthy citizenship. Schools educate more effectively, therefore, for democracy by employing democratic principles and procedures in education. The school must serve pupils by offering a meaningful workshop in democratic learning and living. The real values of education are reflected in the quality of citizenship lived in the school, in the home and in the community.

SIGNS OF DEMOCRATIC ADMINISTRATION

1. Faculty participation in determining educational policies and administrative practices.

2. Single salary schedule.

3. Elimination of competitive drives, such as teacher rating and privileged promotion.

4. Academic freedom.

5. Dismissal only after public hearing.

6. Safeguarding of teachers' rights and privileges as citizens.

7. Teacher council.

8. Elimination of rigid supervision.

9. Recognition of intelligent experimentation and creativity.

The quality of personal relationships offered in the school is more significant than the organization, administration or curriculum. The concept of democracy practiced by administrators or teachers in their social participation with children demonstrates the genuine meaning of democracy. Teachers must examine continuously the effect of their leadership upon the emerging personality and social behavior of pupils. The accepted consequences of teaching and learning find expression in the purposes and actions of boys and girls. Intelligent citizenship requires the application of one's knowledge and skills in his daily association with others. Subject matter is effective only as it contributes to the improvement of social thinking and living. The characteristics of a democratic school are rooted, therefore, in the kind of human relations and democracy practiced by all members of the school personnel.

The following characteristics are readily observed in a school that serves as a workshop in democratic citizenship.

1. The teacher at all times respects the worth and dignity of each pupil. Every effort is made to safeguard and to foster the emerging personality and creativity of each child. Guidance increasing one's purposes and action is the instructional key in developing intelligent social participation.

2. Classroom activities preserve and develop the social status of all pupils. Since no two children are alike, no social stigma is attached to emerging differences. If a pupil is denied status in the classroom, he will be forced to seek other environments in which status with the group is found.

3. The classroom serves as a workshop in democratic living. Ways of living and working together become as important as academic achievement. Democratic cooperation is substituted for antisocial competition.

Artificial drives to motivate learning, such as grades, honor rolls, promotion, competitive contests, ability grouping and teacher approval, are examined in terms of their effect upon boys and girls. Satisfaction in achieving one's goal and in doing work will become the incentive for effective learning. Instructional technics that stimulate undemocratic competition not only are inappropriate but are miseducative. Children must be helped in understanding the value and importance of group planning, group discussion, group thinking, group acting and group evaluating. Leadership that emerges from group appraisal is more valuable than teacher domination.

4. Special attention is given to the relation between freedom and social responsibility. Freedom cannot be given to pupils. Opportunities are provided in which children learn the

Extracurricular activities stimulate the development of group responsibility.

meaning of freedom by working for it. Social responsibility is stressed as a correlative of earned freedom. Classroom activities stimulate the acceptance and practice of social responsibility.

Pupils are encouraged to understand the need for respecting the rights and property of others. The final test of classroom activities is found in the use made in out-of-school life of the knowledge and skills acquired in school.

5. The democratic school recognizes the importance of social attitudes and values in social participation. Pupils acquire their attitudes and values as they live with other persons. The teacher, therefore, encourages pupils to appraise their emerging attitudes and values. The development of tolerance, open-mindedness, fair play and sensitivity to welfare of others is an example considered as basic to citizenship as the acquisition of knowledge.

6. Pupils have many opportunities to share in formulating the educational policies and practices observed in the classroom and in school. Such participation fosters the development of group sensitivity.

7. Children are helped in understanding the difference between testing and evaluation. Individual and group evaluation is a basic element in the educative process. The child should be encouraged at all times to meet his best standards of workmanship. To work for artificial recognition, such as grades and teacher approval, impairs personality development and social participation.

8. The possession of a creative mind is indispensable in democratic living. The school must foster ability in problem-solving. Pupils are encouraged to ask questions, present problems, indicate points of conflict. Solutions to problems emerge from thinking rather than from formal memorizing. Special attention is given to desirable methods of attaching new problems or new situations. Intelligence is the ability to cope adequately with emerging situations and problems. The scientific method is used as the means for seeking solutions. Thinking and acting-on-thinking are stressed at all times. Education should produce intelligent self-direction and social sensitivity. Controversial issues are discussed as they emerge in the learning experiences and needs of pupils.

9. A program of school-community relations is another phase of a school that seeks to educate for democratic citizenship. Parents and teachers must work together in seeking the fullest development of each boy and girl. Parents are encouraged to visit school and to share in many phases of the school program. Pupils are encouraged to use the community as a source of reference material for classroom activities. Well-planned excursions are made into the community. The human relations side of the community is studied in addition to industrial and commercial features. The school plant is used for many community activities.

If children are to be offered an environment in democratic living, it is essential that teachers be the recipients of democratic administration. The principles of learning and living that we desire for children are equally important for all members of the school personnel. The organization and administration of the school, therefore, must be evaluated in terms of their effect upon the growth and democratic practices on each member of the school.

Some of the important features of democratic administration are: faculty participation in determining educational policies and administrative practices; single salary schedule; elimination of competitive drives, such as teacher rating and privileged promotion; academic freedom; dismissal only after public hearing; safeguarding of teachers' rights and privileges as citizens; teacher council; elimination of rigid supervision; recognition of intelligent experimentation and creativity.

A democratic school stands for high scholarship, individual and group responsibility, democratic citizenship and worthy character. These outcomes are best achieved in an environment that demonstrates, through practice, the genuine values inherent in democratic living. The quality of living observed reveals the kind of democracy learned and the willingness of individuals to struggle to protect democratic values.

It is the struggle for democracy that demands our total effort and reveals the character of our citizenship. Children will learn democracy only as they live it. They will be ready to defend it as they experience its functional values to individual and group welfare. Schools cannot evade, without serious consequences, the obligation to educate for democracy.

Activity Period Sells Itself

JOSEPH E. BARBER

Principal, East Aurora Junior-Senior High School, East Aurora, N. Y.

THE activity period, although not a new idea, was an innovation as far as the East Aurora High School, East Aurora, N. Y., was concerned. A faculty-pupil committee, with the principal as chairman, made an extensive study and prepared lists of various clubs and hobbies of the pupils and attempted, through the medium of a questionnaire, to discover the principal interests of the pupils. The committee worked through the spring semester of 1938. Pupil members of the committee visited other schools of the vicinity to learn what was being done in those schools concerning pupil interests.

As a result, 37 clubs were promoted at the beginning of the school year 1938-39. During that year, 98 per cent of the pupils belonged to one or more of those clubs; only 11 of the 812 high school pupils failed to find anything among the clubs that seemed to appeal to their interests.

When these pupils were questioned individually by the counselors relative to their seeming lack of interest, all 11 asserted that, because of excessive work demanded by home conditions, it was necessary for them to use the activity period time for study.

New Opportunities for Learning

It was the feeling of the committee that not only would these activities reenforce the class work but that each club would provide an opportunity for learning beyond that available in the formal program of the school.

It was thought that the available program would provide for leisure-time activities and this has been proved to be true by the large number of pupils who have carried on the interests that they acquired during the activity period. The most outstanding examples are the camera club and the debate club. Others, such as vocal music, band, orchestra, journalism and the writers' club, have been made regular parts of the school program.

The counselors were enthusiastic about the vocational aspects that were stressed in many of the clubs, while the administration thought that the enthusiasm and momentum of youth would be steered into channels that would not only influence their vocational life but would also result in a permanent interest in the school and a future interest in the community at large. Hartshorne* has aptly termed such activities "outreach" interests and attitudes and stresses the values that accrue to the pupil when he becomes a student at college.

Pupils Are Enthusiastic

A curtailment of the staff forced the discontinuance of the activity period at the end of the school year as it was necessary to use the time for a regular class period. In a questionnaire conducted in all the English classes, 800 pupils expressed enthusiasm about the usefulness and interest of the project. All expressed the opinion that they had received benefits from the clubs of which they had been members.

It was revealed that no single club appeared to be outstanding in the minds of the pupils although photography, dramatics and music were mentioned frequently by the pupils as being organizations that they had enjoyed or would have liked to have joined had the time been available. It appeared that dramatics and music gave a great deal of satisfaction, while the camera club appealed to many because of the unusual interest in photography that had started in the school about that time.

In addition to the values that the pupils mentioned, a total of 22 pupils spoke at the monthly meetings of the parent-teacher association. One gave a radio address on the value of the activity period and as many as 50 others gave demonstrations of the work that they had learned to do during this period. These appearances were made before the school assemblies and various civic organizations in the village. Two members of the boxing club entered the Golden Gloves boxing tournament in Buffalo and one of these boys is considered an outstanding prospect in the middleweight boxing division by the officials of the boxing tournament.

A questionnaire answered by the high school faculty revealed that six teachers were definitely opposed to the project, that five were in favor of it as it was being conducted and that 17 were in favor of the project with readjustments. In the final analysis, it was the opinion of the faculty that there was a tendency on the part of too many pupils to regard the activity period as an old-time recess in which they could "fool around."

Moreover, inasmuch as each club met for only one period a week, the very nature of some of them made it impossible to produce satisfactory results. For example, the coach of the boxing team advanced the argument that it was not possible to teach boxing as it should be taught in one period a week.

Better Adjustment to Life

The faculty believed that there was a better adjustment among those pupils who participated in the activity period than there was among those who did not. While no extensive study has been made with the college students, Hartshorne* reports that the scholastic performance of those who took no part in the activities of their high schools was "signficantly lower than that of those who participated in such extrainstructional activities," and he found that the social adjustment of those who participated was better. It is my belief that the clubs that the pupils entered and worked in in high school have given them an adjustment quality that will serve them well throughout their lives.

*Hartshorne, Hugh: From School to College, Yale University Press, 1939.

Front view of the Veterans' Memorial School at Camden, N. J. Designed in the Colonial tradition, the building is of red brick with granite and limestone trim. The clock on the front of the building is automatically lighted at night.

Below, left: The auditorium, showing the main floor and balcony. The room seats more than 1000 persons. An electric organ has been provided. The tone chambers and speakers are concealed behind grilles that pierce the proscenium arch above the stage. Dimmers and master dimmers on the stage lighting panel are so operated that any set of lights, or the entire lighting system of the house, can be switched from brilliance to total blackout. Below, right: Typical corridor showing the recessed lockers and tile wainscot.

OUTLINE OF CONSTRUCTION DETAILS

CONSTRUCTION: Superstructure, structural steel; exterior walls, solid brick furred with metal lath. Footings, foundations and basement walls, reenforced concrete. Windows, standard balanced. Roof, structural precast concrete slab covered with natural slate and copper.

FLOORS: Gymnasium, auditorium, classrooms, wood block. Corridors, cafeteria, domestic science room, terrazzo. Toilet and shower rooms, tile.

WALLS: Gymnasium, salt-glazed tile wainscot. Toilet and shower rooms, tile wainscot. Classrooms, colored tile to window sill height. Corridors, colored tile to locker height. Blackboard trim, aluminum.

LIGHTING: Main entrance, bronze lantern. Classrooms, indirect; stage, footlights, border lights.

HEATING: Split system under thermostatic control.

VENTILATION: Air conditioning throughout.

SOUND SYSTEM: Two-way public address system.

VETERANS' MEMORIAL SCHOOL, CAMDEN, N. J.

BYRON H. EDWARDS

Architect, Camden, N. J.

THE Veterans' Memorial School, Camden, N. J., overlooks the Veterans' Memorial Park in the East Camden section of the city. The plot of ground on which it stands has been merged with that of the park and the added walks and lovely landscaping blend with the greenery of the park, forming an ideal setting.

The structure, designed in the Colonial manner, is of red brick with granite and limestone trimmings and consists of a group of three buildings with a frontage on the park of 367 feet. The central building, which houses the classrooms and administration offices, is three stories in height above the ground and is accentuated at its central axis by a spacious entrance portico flanked with full length fluted stone columns supporting an ornamental stone cornice and entablature.

The portico is paved with stone flagging and has a beautifully modeled cast bronze plaque, a facsimile of the great seal of the city of Camden, set in the floor.

Above the portico rises a clock tower and cupola. The tower is constructed of brick with carved stone trimmings and the cupola is of wood capped with a copper dome supporting a heavy wrought bronze weather vane. The clock, actuated by the master clock system of the school, is of glass and aluminum and is automatically illuminated after nightfall. Directly in front of and on the central axis of the building rises a gracefully tapered steel flagpole.

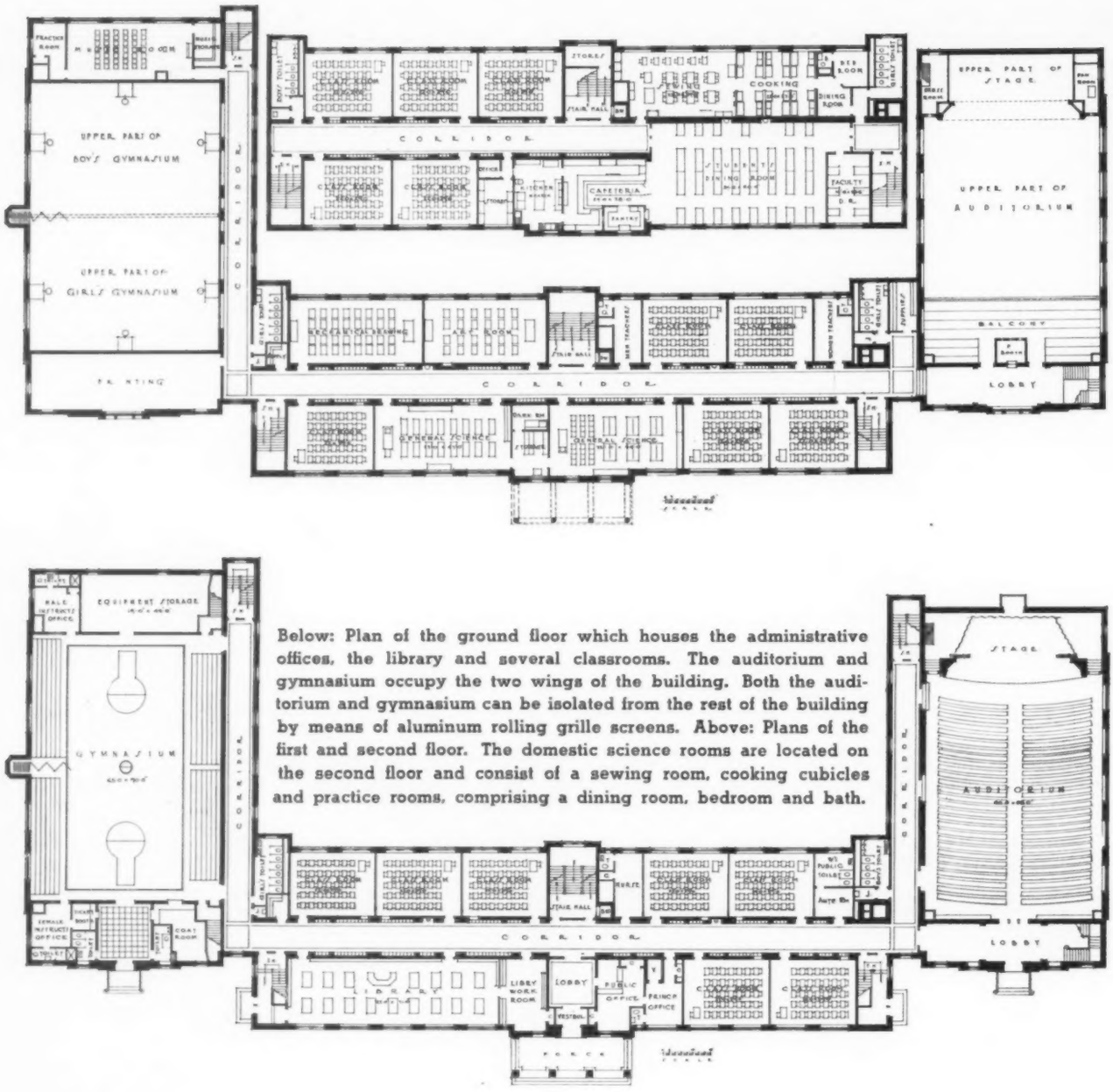
At each end of the central building are located two wings housing the auditorium and the gymnasium, respectively. The two end wings are necessarily subservient to the main building inasmuch as they are only two stories in height and a little less ornate, although the entrance features on the fronts are executed in stone surmounted with Palladian windows.

The auditorium and gymnasium wings extend to a depth of 122 feet along Hayes and Arthur avenues, thus forming a "U"-shaped structure for the entire group. At the rear of the site within the area formed by the wings the grade falls away, exposing to good light a subground floor in which are located the shops, locker rooms, boiler and pump rooms.

All the main entrances to the building are situated on the front of the building. Secondary entrances are provided from the side streets and the rear and a semicircular driveway is provided on the Twenty-Fourth Street side, which allows cars and delivery trucks to approach within a few feet of the entrance.

Below: View of the cafeteria looking from the service counter. The cafeteria is finished with terrazzo floors and a six foot tile wainscot. Counter is constructed of stainless steel.

Above: The physics laboratory located on the first floor. Like other classrooms, it is floored with wood block oak; walls are wainscoted to the height of the window sills.



Below: Plan of the ground floor which houses the administrative offices, the library and several classrooms. The auditorium and gymnasium occupy the two wings of the building. Both the auditorium and gymnasium can be isolated from the rest of the building by means of aluminum rolling grille screens. Above: Plans of the first and second floor. The domestic science rooms are located on the second floor and consist of a sewing room, cooking cubicles and practice rooms, comprising a dining room, bedroom and bath.

The more than 40 rooms in the building are served with spacious corridors. In the number of rooms are included the usual 35 pupil classrooms; science rooms and laboratories; domestic science rooms; shop room; cafeteria and kitchen; administration offices; teachers' restrooms, and a library, together with the auditorium and gymnasium with their auxiliary rooms.

The shop area is so situated as to permit the entrance of automobiles and boats for vocational training along these lines and is equipped with wood and metal working machines.

The auditorium and its approaching lobbies and foyers have been designed in the early Colonial or Georgian architecture and the dignified simplicity of the ornamentation and draperies is impressive. This room, one of the largest in the city, seats well over 1000 persons. The acoustics are so well controlled that the ordinary human voice can be heard by everyone in the room, although the auditorium has been equipped with a public address and radio speaker system, which is extended to all classrooms and to the gymnasium and is controlled from a central console located in the principal's office.

The stage, of regulation size, extends almost entirely across the front of the auditorium. The lighting panel board at the rear of the stage provides for the control of the house lights, as well as the multicolored lights in the footlight trough and the border lights above the stage.

On the balcony at the rear of the auditorium a standard fireproof motion picture booth is installed with wiring to the stage for talking pictures.

The gymnasium can be divided into two sections by means of a huge sliding folding partition, electrically operated. When not in use, this partition is folded back into a pocket giving an unobstructed view of the entire gymnasium. Folding permanent bleachers seat approximately 800 people. Ample dressing rooms, shower rooms and locker rooms have been provided for in the lower floor beneath the gymnasium.

Inaugurating a Junior College

VERNON E. ANDERSON

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The school administrator who plans to establish a junior college will find valuable help in this article which outlines the essential problems that must be considered and warns of the pitfalls that may be encountered

THE task of inaugurating a junior college is one to be undertaken only by the administrator who is challenged by the opportunity to provide a program to fill the educational needs of his community. He must not be afraid to experiment, for the junior college is still in the experimental stage.

The community that desires merely to emulate the university in offering the first two years of preprofessional work for the comparatively small group for which the higher institutions of learning have already provided does not have the proper vision required for the successful operation of this unique type of institution.

Probably the most important consideration during the early developmental stage is to study the philosophy of the junior college as expressed in recent educational literature. Although the *Junior College Journal* affords an opportunity for an examination of that evolving philosophy and the thinking of men who have made this field of education their life work, two articles written by Clyde M. Hill and Harl R. Douglass, published concurrently in the October 1940 issue of the *North Central Association Quarterly,* should be read and reread by administrators who are considering adding a junior college to their school system.

A general philosophy applied to their own institution in their own particular community should be determined by the board of education and the superintendent of schools in advance of the actual functioning of college. The more specific concept of that philosophy must, however, evolve from the study by the faculty of the community and its needs and opportunities, the curriculum, the students and the junior college movement as a whole. The administrator overlooks a unifying and integrating force for his institution if he fails to hold regular faculty meetings for the discussion and investigation of these problems.

Before the beginning of the first year of operation definite preprofessional and terminal curriculums must be organized into specific courses and credits, listed to indicate the work to be carried by the students in each of the two years. Preprofessional courses should be in accord with those offered at the university as an accrediting agency. The junior college dean cannot safely copy curriculums found in other bulletins. Each college has made its own arrangements with the university in regard to the work of its transfer students, substitute courses having received specific approval.

A catalog should indicate definitely how much credit the prospective student can expect to obtain toward his degree; a new institution cannot afford to mislead students either through lack of careful attention to these details or through a deliberate attempt to make it appear as though two years of almost every conceivable preprofessional curriculum can be obtained. In the early years of the institution, it is well to accumulate on file letters from various colleges dealing with cases not specifically covered by curriculums listed in the college bulletin.

In planning terminal curriculums, community surveys and a study of the experimental work done by other junior colleges are essential. These curriculums should not be standardized but should be open to experimentation and change as the program develops. An adequate enrollment in any course should be one standard governing the number of offerings in order that the entire program will not lose its effectiveness by being spread too thinly.

Selecting the faculty of a newly organized junior college is a duty that needs to be carefully performed. In the first place, finding the right instructor is difficult because of the rigid certification standards. It will be extremely difficult at times to obtain properly trained people qualified to teach the newer type of courses in the terminal fields. In addition, the success of the institution will depend in a large measure upon the training, sincerity, interest and competence of its teaching personnel.

Since the junior college is still in the experimental stage, the instructor must be interested in experimentation in his courses. Since it is a community institution, he must be able to make community contacts easily. He must be of sufficient maturity to command the respect of students many of whom may be up to 25 years of age. He will be expected to do research work in his field of teaching. Most of all, he must have a real interest in education and the problems facing the junior college.

In choosing between an instructor who has had high school teaching experience and one with four year academic college experience, everything else being equal, the former should ordinarily be selected. High school instructors are more likely to be acquainted with the problems of the age group and the type of varying abilities found among junior college students.

The dean should have a long-range vision of his college in the selection of his faculty. It is just as necessary as in high school to select a personnel competent to handle the various extracurricular activities that will be a regular part of the junior college work. Moreover, with an inevitably growing popula-

tion for the first few years, the future load adjustment must be considered.

Although fifteen hours a week of academic teaching, counting two laboratory hours as equivalent to one lecture or discussion hour, is usually considered as the standard, as yet no satisfactory means has been found for determining the normal load of instructors of shorthand and typewriting courses.

In order to obtain well-qualified instructors it is a good policy to employ the married men on a twelve month basis. The returns in services to community life and the possibility of using these men for summer counseling and contact work will far exceed in value the additional expense.

Selecting the Faculty

The use of high school teachers in junior college is not to be recommended except in cases in which it may be necessary, such as in the special fields of agriculture, art, women's physical education and shop. Difficulties in scheduling will arise. The dual administrative control is not satisfactory. The teacher is likely to consider himself primarily as either a junior college or a high school faculty member and the other part of his work will take on a secondary aspect for him.

It is difficult to obtain good junior college instructors for less than from $1500 to $2400 as a beginning annual salary. In a recent unpublished study, I found that in a group of 54 public junior colleges with a median of 187 and a range of from 75 to 250 in enrollment, the median salary of instructors was $1950; the upper quartile, $2243, and the lower quartile, $1600.

The median of the deans' salaries in the same group of schools was $2900; the upper quartile, $3300, and the lower quartile, $2450. These figures are for the year 1938-1939 and include about one fifth of all public junior colleges in the United States.

The planning of building space will necessarily depend upon available facilities. Few junior colleges are fortunate enough to be housed in a separate building. Although a joint use of laboratories with the high school will avoid duplication, the advantages of having a separate building will more than offset the disadvantages of the added expense. A separate unit of the high school building is the next best arrangement, avoiding all possible intermixing of the two groups of students.

One of the major first year problems of the new unit is to build community support and good will. The staff can assist immeasurably in this task by taking an active part in the work of local organizations and by speaking at various occasions in the surrounding locality as a part of the services offered by the institution.

In planning the program of the college to fit the needs of the community, the assistance of business men and local organizations through advisory committees will be found invaluable. Well-planned student programs at civic and service clubs, open house, special days for parents and constant newspaper publicity are helpful in obtaining local support.

Careful job placement and follow-up work for students and graduates by a designated staff member are also necessary. The junior college must be a real community institution in its services to both youths and adults.

High-Pressure Selling Vetoed

Contacting prospective students begins the summer before the opening school year. It should be done for the purpose of extending frank information concerning what the college can offer. High-pressure salesmanship has no place in work of this nature. Unkept promises and exaggerated statements will serve merely as a boomerang. The dean who has had training and experience in counseling can offer a genuine service to seniors and schools in surrounding towns.

Summer counseling of students before they enroll will enable the college to assist in the selective process of students who have aptitudes and interests, finances and opportunities suitable for the varied types of training. The most important part of the enrollment process is this preliminary counseling. The junior college should serve as a center of information for good guidance procedures in its area.

The college bulletin, usually issued annually, and small pamphlets printed from time to time constitute one major feature of publicity. One of the administrator's first tasks is to issue a bulletin that will describe the work of his own college.

A large enrollment cannot be anticipated in the first year. Moreover, it should not be a shock to find that 50 per cent of the freshman class fails to return for a second year. Such will be the general trend over a period of years. Students who cannot receive more than one year's training in their chosen field should be encouraged to transfer at the end of the year if their situation permits. Transfer to another institution, employment, lack of funds and other reasons will keep a number from returning to complete the two years.

The Dean Is Important

One of the first steps of organization is the securing of a dean who is capable of administering and supervising his unit in the school system without placing a great deal of burden on the superintendent of schools. Although cooperation between the head of the school system and the dean in determining the general policies is an absolute necessity, the superintendent should get a man in whom he has confidence to administer the college. At the same time, the autocratic principles of management characteristic of business will not succeed in the long run.

Staff members, in turn, should have a definite part in formulating the policy of the college and in assisting in its administration through faculty committees. Well-trained and mature as the instructor at this level is required to be, he must be given credit for the ability to add valuable experience and knowledge to the administration of junior college affairs.

The establishment of tradition and the fostering of a spirit among students whereby they come to regard the college as their own and to take pride in it are necessary. Convocations, social activities and clubs form a nucleus of activities that the new institution needs to inaugurate. A student or a combined student-faculty council is an essential unit for the administration of such activities and acts as a unifying and integrating force.

Correspondence Centers

Let's Guard Rights of Local School

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A HIGH school sets out to enrich its curriculum by the use of supervised correspondence study. It registers a few pupils for vocational courses, special academic courses, the arts—any subject needed by individual pupils that the school does not or cannot offer in residence. Then what happens to the relation of the school to the pupil? Does the school cede away some of its control, free itself of some of its responsibility? Is the pupil thereafter only partly a member of his local school and for the rest a member of a distant correspondence school?

To state the question more generally: Is supervised correspondence study a threat to our established principle of local autonomy? Does it run counter to the principle that every school should determine the best interests of its pupils and hold the responsibility as well as the authority to serve those interests?

Status Must Be Defined

Nowhere in the United States has supervised correspondence study run counter to local autonomy. But as the program grows, clear thinking and careful organization will be needed to keep it always in its proper relationship. A brief description of two types of correspondence centers now in existence, with the implications of each type of organization, will clarify this point.

In New Zealand and in the provinces of Australia and Canada, state correspondence schools that are centrally operated and controlled have been established. When a pupil registers for correspondence work, he becomes a member of the student body of the state correspondence school.

The pupil may, and often does wear a badge or the traditional cap and blazer, identifying him with this school. He may belong to clubs and societies sponsored by the correspondence school. His progress is controlled directly by the correspondence school, working with his parents, under the guidance of his correspondence instructor. The correspondence school is, in effect, a parallel and more or less independent branch of the total school system. In the main, its work is carried on independent of the resident school system.

When all education is centrally controlled, as in the countries mentioned, such control of correspondence study is not surprising. In the United States, however, the setup must be different. In no state is education dominated by a central department or agency. And we who advocate the extended use of supervised correspondence study shall always be unalterably opposed to centrally dominated state correspondence centers.

In order that supervised correspondence study may serve schools and their pupils most advantageously, the local schools must retain their well-established, traditional control over the education of the children entrusted to their care. Educational leaders establishing and operating correspondence centers must be careful not to interfere with these controls.

Problems to Be Considered

Whether or not a pupil should use the medium of correspondence instruction, what courses he should take, through what center he should be registered, where he should carry on his study, who should be his supervisor, when credit should be issued, all these are matters of local concern, to be decided by local school authorities in the light of their first-hand knowledge of conditions and needs.

If, after a course is selected, the administrator or the supervisor in the local school feels that certain sections of the course should be omitted or that certain additions are desirable, if he feels that the pupil is not receiving proper consideration from the correspondence instructor or if he feels that motivation is not satisfactory, it is not only the right but the duty of this official to insist that the correspondence center adjust its teaching to the individual pupil; it is up to the correspondence school to make the necessary adjustment.

Every correspondence center so far established in the United States actually depends upon such cooperation between the local school and the correspondence center. Two centers, those in North Dakota and Montana, contain in their titles the suggestion that they are independent schools incorporated by the state; that, as such, they need not be affected by the needs or desires of individual local schools. These two centers can issue credit directly to pupils. They can issue diplomas to pupils who complete all their work through supervised correspondence study or who complete the last part of their work by this means. Although these two centers are operating on a cooperative basis with the local schools, exactly as do other centers that do not have the same elements of independence, the educator interested in building safeguards against any sort of abuse may not be pleased with such an arrangement.

Function as Service Agencies

In no other state that operates a correspondence center (Arizona, Colorado, Massachusetts, Michigan, Nebraska, Oklahoma, Pennsylvania, South Carolina, South Dakota or Wisconsin) is there a state correspondence school *per se* or is one contemplated. In all these states, correspondence centers exist only as service agencies, with no function except to serve the needs of the existing schools. Through centers of this type, pupils earn credits that are applied toward graduation from

their own schools. No diplomas can be issued by the correspondence center.

Every member of the teaching staffs of these centers realizes that he is not an instructor of a state correspondence school but that he is a faculty member of every school in which he has a pupil. At all times each local school administrator knows that he is in complete control of the education of his pupils, whether they are studying under a local teacher or under a correspondence instructor. He appreciates the fact that when he registers pupils for correspondence instruction he simply hires the part-time services of specialists located at the correspondence center and adds them to his faculty.*

In the present development of supervised correspondence study, educational leaders have been careful to guard the rights of the local school and to keep in mind the individual pupils whom this method of instruction has been built to serve. But the danger is not eliminated altogether.

Thirty-five states have not established centers and many of them will do so during the next few years. An unwisely conceived and organized state program in any of these states could become so autocratic and dominating that many of the rights of local schools would be trampled upon and the service to individual pupils would cease to be educationally sound.

There is nothing inherent in a state program of supervised correspondence study to make it run counter to the principle of local control. Any such result could be due only to faulty organization and a misconception of the purpose for which supervised correspondence study has been developed. One principle stands foremost in the minds of those educators now conducting correspondence centers: The correspondence center exists only as a service agency to be used by the existing school system.

*All this is no argument against state operation of correspondence centers, which we strongly favor. There is a clear distinction between the kind of control needed to operate a center and the kind that would cause it to usurp local school prerogatives. cf. Junior-Senior Clearing House, September 1934, pp. 48-50, or the Report of the First National Conference on Correspondence Education, 1938, pp. 115-123.

A Method for Grouping Pupils

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BELIEVING that the common practice of grouping pupils by intelligence quotients was not specific enough regarding certain aptitudes and abilities, the public schools of Lakefield, Minn., instituted a new device last fall as an experiment in their ninth grade.

Grouping pupils by I.Q.'s alone seemed to leave too much about each pupil unknown, so it was decided to take one ability that all had in common and section a class accordingly. Since reading ability can be somewhat accurately measured by standard tests, since the development of the various reading skills is a primary aim of education that is frequently taught only incidentally in the secondary school and since reading is needed in all subjects, this ability was chosen.

Undoubtedly, some educators will contend that the method discussed cannot be applied to all situations because of schedule difficulties. It is true that not all classes on a certain grade level can be grouped according to reading ability; there would be no really valid reason for sectioning physical education classes, for example, according to this skill.

However, at least two subjects on a grade level can be grouped according to some specific ability. Then, in those classes teaching can be adapted to what is specifically known about the pupils.

As far as schedule making is concerned, the classes that will be affected by this method of grouping should be constants required of all pupils (English and the social sciences are probably the best combinations, both requiring much reading). These classes then can be scheduled during the same period of the day with the only conflicts arising from retarded pupils.

Since the enrollment at Lakefield is not large enough to divide classes into more than two units, the results of the Iowa Silent Reading Test, which was used as the criterion of measurement, were used to section the ninth grade into two units, those pupils falling above the fiftieth percentile score being placed in one group and those below in another. These two units were then carried intact into English and general business training and were allowed to split up in the other classes at the ninth grade level. This meant that in general business training and in English at least, teaching could be adapted to reading ability.

From the results of the reading test other information besides that necessary for grouping the classes was compiled.

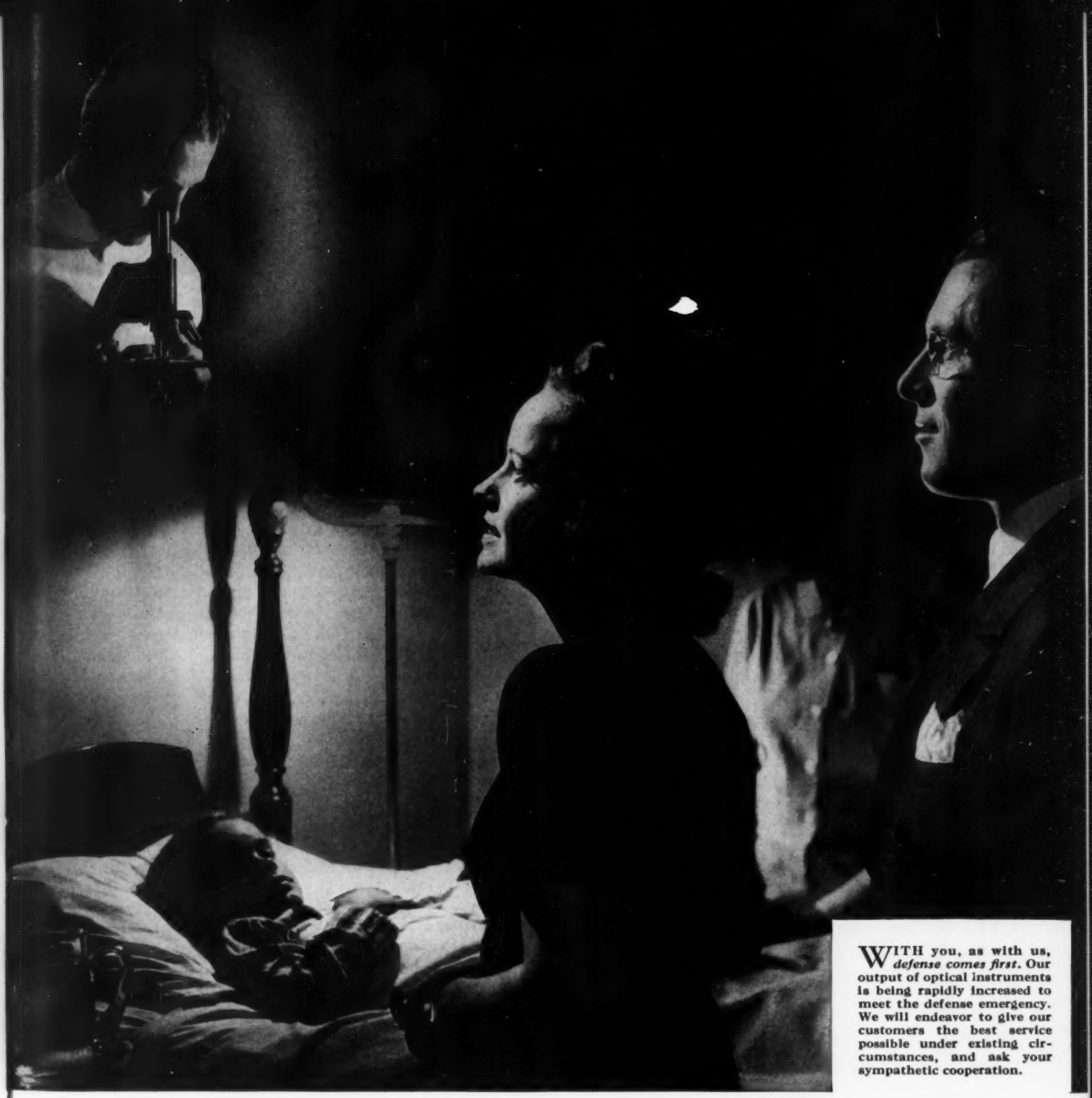
1. A comparison was made between the local group and the standard group.

2. A correlation between I.Q. and reading ability was determined whereby it was found that one sixth of the class who were in the upper 50 per cent of the group according to I.Q. rating were in the lower 50 per cent in reading ability and that one fifth of the group who ranked in the lower 50 per cent according to I.Q.'s were in the upper half of the class in reading ability. Thus more than one third of the group would have been misplaced in their reading abilities if I.Q.'s had been used to determine the sectioning.

3. A comparison was made between urban-trained pupils and rural-trained pupils.

4. Specific information for each pupil was compiled along these certain reading skills: (a) rate and comprehension, (b) directed reading, (c) poetry comprehension, (d) word meaning, (e) sentence meaning, (f) paragraph comprehension and (g) locating information. Thus it was determined in which particular skills a pupil needed remedial work and in which ones the whole group needed attention. It was found that 64 per cent of the pupils had as one of their two weakest points in the seven skills mentioned that one of word meaning.

It seems from results of this method as they have been observed in Lakefield: (1) that more purpose lies back of grouping pupils, (2) that teachers have exact foundations for teaching methods and (3) that better individual remedial work can be accomplished by the school.



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New Laws on Finance

and Organization of Local Units

M. M. CHAMBERS
Specialist in School Law

IN this magazine in June 1941 I reviewed some encouraging new legislation on state school finance in half a dozen states whose legislatures adjourned early in the year. That part of the story can now be continued, along with some reports of other recent enactments touching the organization and functioning of county units and other local units of school administration.

Adding to the evidence of progress in state support of public schools, Minnesota appropriated for state aid $8,102,000 for the first year and $8,287,000 for the second year of the current biennium. These figures represent substantial increases over the amounts that were appropriated for the preceding two years, which were $7,750,000 and $8,050,000, respectively.

The state of Washington passed two separate acts to provide for state aid to local school districts. One act appropriated $700,000 for the biennium to be used for operating expenses in districts that would otherwise be unable to maintain adequate school terms, provide transportation for pupils or pay minimum salaries.

This act also took special cognizance of the fact that some districts will have a great influx of pupils as a result of the activities connected with the national defense program.

Funds for Building Purposes

The companion act appropriated $3,000,000 for grants made to local districts, to be used for building purposes. In an effort to coordinate the school building program with the problem of supplying employment for relief clients, it was stipulated that all applications for building aid, after having been passed upon by the state superintendent of public instruction and the state board of education, shall be further subject to approval by the state social security committee, which is composed of the governor, the state director of finance and one lay member appointed by the governor.

Delaware's appropriation to the state board of education for the support of public schools during the 1941-43 biennium was $8,008,763.48. This carried a special allotment for adult education; a separate act appropriated an additional $10,000 for the biennium for adult education in the city of Wilmington. Delaware also authorized a bond issue of $1,165,000 to finance a state-wide school building program, leaving the allotments to each district and the priorities thereof largely at the discretion of the state board of education.

Mr. Chambers brings up to date his earlier review of some of the more encouraging recent enactments of various state legislatures covering school finance and also discusses several new laws on the functioning of the county units of administration

New York continued for the fiscal year 1942 the cut of 2 per cent to be deducted from the state aid to be apportioned to local districts, based upon the year which commenced July 1, 1940. No deduction is to be made from amounts apportionable specifically for transportation of pupils and for the construction of school buildings.

North Dakota appropriated $500,000 for the biennium as an emergency fund to aid financially distressed school districts. Payments are to be made from month to month as determined by the superintendent of public instruction. No district shall participate except upon proof of maximum local financial effort and upon proof of a reasonable pupil-teacher ratio. One series of payments is on a teacher-unit basis, consisting of $120 for each grade or high school teacher unit in districts having not more than four teachers and $100 for each such unit in larger districts. Another series of payments is on a per-pupil basis, consisting of from 50 cents to $11 per pupil, adjusted in inverse ratio to the amount of the assessed valuation in the district for each pupil.

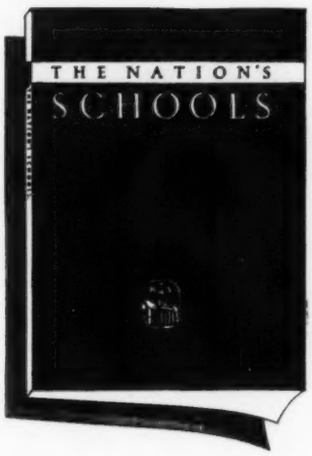
In both the foregoing series, school districts levying within one mill of their normal maximum levy are entitled to full payment, but the allotment is to be reduced by 25 per cent as the local levy drops one mill, so that districts whose levies are less than within four mills of the normal maximum shall receive no payments.

Iowa remains near the bottom of the list of states with respect to the volume of state aid to local districts. Total appropriations for that purpose by the 1941 legislature were only $411,450, of which $104,450 was for normal training schools and normal institutes. Iowa amended the statutory limitation on indebtedness to make it read "assessed valuation" instead of "actual valuation." Since the former is 60 per cent of the latter, this effects a substantial reduction of the future debt limit.

Nevada Increases State Levy

A change in the basis of state school finance regarded as of some importance in Nevada is a new statute authorizing a state levy of 31 cents per hundred dollars of assessed valuation for the state distributive school fund. Previously, this state levy never exceeded 11 cents and in recent years it had been necessary to make substantial appropriations out of the general fund in order to piece out the state's contribution to local school districts.

Colorado specified that all rentals received from state forests are to be devoted to school purposes—three



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fourths to go to the state public school income fund and one fourth to the county school fund in the county in which the land is located.

West Virginia took another step toward perfecting its county unit system by providing that members of county boards of education shall be elected on nonpartisan ballots for six year terms, overlapping in such a way that no more than two terms will expire in any one election year. No person may serve as a board member if he holds any other position in the federal, state or local governments or if he is a member of the executive committee of any political party.

Terms of County Superintendents

County superintendents in West Virginia are elected by the county boards of education for terms of not less than one year or more than four years. This year the legislature increased the maximum annual expense allowance for county superintendents and assistant county superintendents from $300 to $500 and made the eligibility requirements the same for both offices, namely, a valid certificate, a bachelor's degree from an approved institution, 12 semester hours of credit for study of administration and supervision and five years' experience in teaching or supervision. Formerly, the 12 hours of credit were not required for assistant county superintendents.

Arkansas created county boards of education composed of five members to be elected for terms of five years in such manner that one term shall expire each year. These boards are to have jurisdiction over all school districts in their respective counties except those employing a superintendent of schools who devotes not more than half time to teaching. County board members are to be nominated by petitions carrying the signatures of at least 50 electors. Each board is directed to employ a county school supervisor to take office July 1, 1942, to succeed the present county examiner.

It will be recalled that the office of county examiner superseded that of county superintendent of schools in 1933, when the former county boards of education were also abolished. The 1941 act is somewhat in the nature of a restoration of the earlier plan, with improvements.

The new county supervisors of schools must be holders of a degree based on four or more years of work in a college or university approved for the certification of teachers and must have had either three years of experience as a school administrator or five years as a teacher. The county board is directed to fix the salary at from $1500 to $2700, of which the state will pay $1500 in all cases. Allowances for travel may be fixed at from $300 to $600, for clerical help at not to exceed $720 and for office expense at not more than $300. In counties having as much as 30 per cent of their population colored, the board may appoint an assistant supervisor for colored schools, with salary and allowances that are not to exceed $1200.

There seems to have been little or no net progress in 1941 toward facilitating the crucially needed forming of larger local districts. One new statute in Oregon provides that when a part of a district not maintaining a high school becomes a part of some high school district, this part shall remain liable for its proportionate share of any indebtedness incurred prior to its detachment from the non-high school district.

Another amendment recently passed in the same state forbids district boundary boards to transfer any territory in such manner as to reduce the teaching unit apportionments from the state elementary school fund to any district, without submitting the question to the voters of the district that would lose territory. Thus, the legislature interposes a long arm into the affairs of the somewhat top-heavy system of local boundary boards that was set up in 1939 with high hopes.

Plan for District Reorganization

This year the state of Washington also provided for an elaborate, cumbersome and slow-moving system of committees to plan for the reorganization of school districts throughout the state.

Each county is to have a committee of from seven to 13 citizens to be appointed locally within a year and a half. There is to be a state committee of nine members appointed by the state board of education. One of the nine must be a member of the state board of education and four must be laymen. The life of the committee is set at four years, subject to extension.

County plans of district reorganization must be approved by the state committee and by majority vote of the electors of each proposed new district. After reorganization any district having a population of more than 10,000 will be a district of the first class and all others will be districts of the second class.

Arkansas expressly stipulated that no school district shall be merged with another without the consent of its electors. An act of 1933 designed to effect the same result left a loophole whereby large districts could absorb small ones without their consent in cases in which the territory affected lay in more than one county. Accordingly, large districts shrewdly used the device of including some territory in an adjacent county in a proposed merger, when their real chief aim was to absorb a small district in the same county. The new statute is apparently a net setback for the generally desirable forming of larger local units.

Defense Situation Met

Iowa enacted a statute to meet the emergency defense situation by authorizing transfer of school property to the federal government when it is situated on lands acquired as the site of an ordnance plant or other defense project. A companion act provides that when a "rump" district is left by federal acquisition of lands for defense purposes, the county board of education shall have full and final authority to merge such rump district with an adjoining district or districts.

Washington authorized the school boards of two or more districts to join in buying supplies, equipment and services collectively by maintaining a joint purchasing agency or otherwise. Minnesota made two changes in the statutes regarding contracts for materials, supplies or construction.

Hereafter, contracts of this kind must contain stipulations prohibiting discrimination in the employment of persons on account of race, creed or color. Henceforth, a school board may contract by unanimous vote with a cooperative association in which some of the school board members are shareholders, but not officers or managers.

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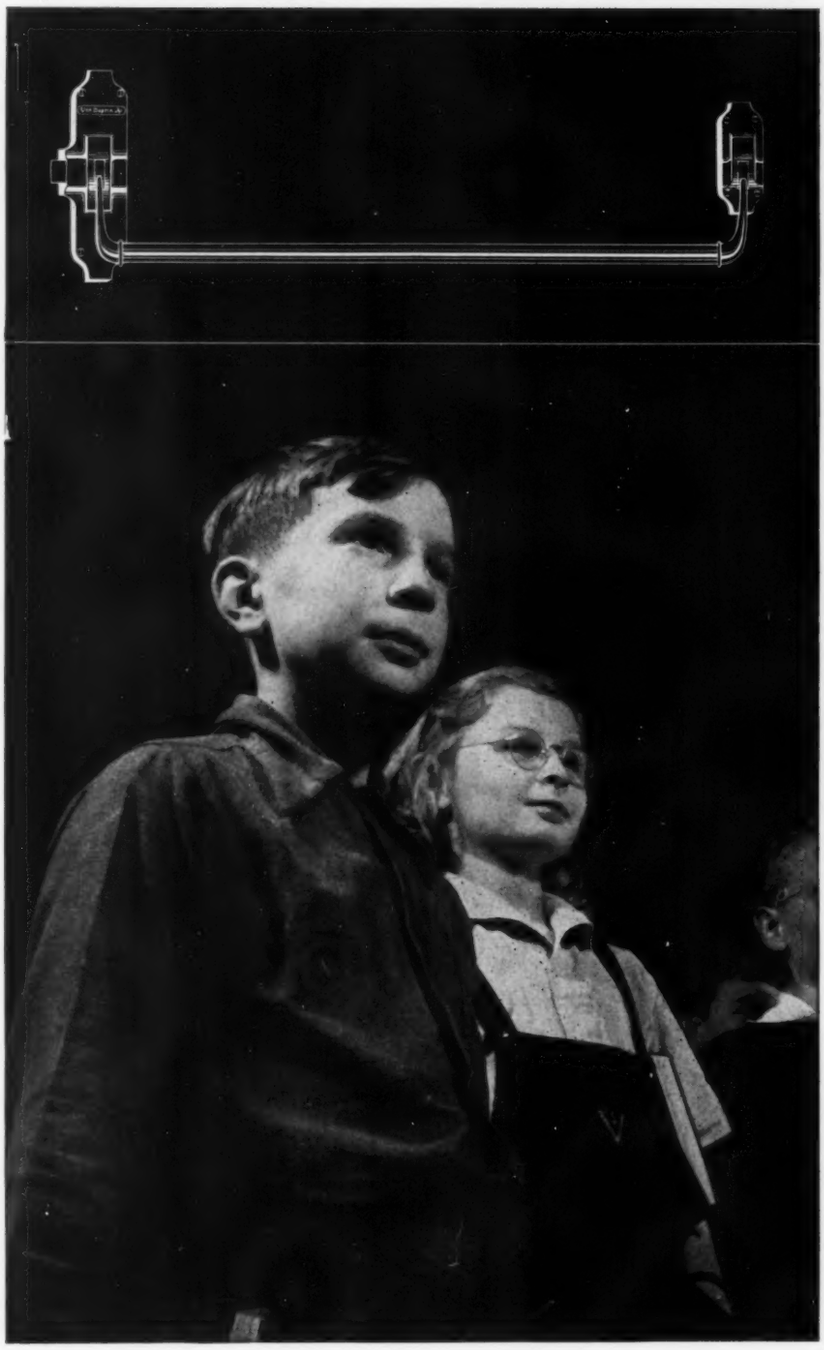

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Let Pupils Do the Decorating

EMILY H. DAVIS

**Head of the Art Department
South Dakota State College,
Brookings**

Waiting in line at the lunch hour is not nearly so tedious if there are interesting and attractive pictures to look at both in the cafeteria and in the corridors.

EDUCATORS make frequent reference to the advisability of pupil participation in group activities. They are constantly endeavoring to bring about closer relationships between the theories of the classroom and actual life situations.

Upon occasion, excellent correlation has been achieved. For example, classes in English, history, speech, art, clothing, manual training and music cooperate in the production of the class play. The school annual serves as a vehicle for the practical use and correlation of otherwise widely divergent activities. The decoration of the cafeteria offers a great many such opportunities that, to date, have been only partially explored.

The following suggestions for making the cafeteria a more attractive place in which to eat are offered with the theory of pupil participation in mind. It is hoped that some of the suggestions will serve as motivating ideas that can be modified and adapted to the local situation.

In a previous article, "Cafeteria in New Dress," which appeared in the September 1938 issue of The NATION'S SCHOOLS, the general decoration of the cafeteria was considered. Floors, furnishings and the painting of walls and ceilings were discussed at considerable length. These are things over which the pupil would have little or no control and no opportunity for purposeful activity. In an old unit such things as were there would have to continue in use whereas in a new plan the architect and contractor would make provision for all decorating and furnishings.

Here we are concerned with those contributions that the pupils can make to their cafeteria. They will take a great deal more pride in the cafeteria and make use of it more frequently if its appearance and attractiveness are due to their own efforts and activities. In view of the fact that we adults have not always been too successful in making the cafeteria attractive to those for whom it was intended, it would be an interesting experiment to let the pupils take over.

The first and most obvious carry-over from the classroom is in the planning, preparation and serving of the food. Although we are not primarily concerned with food service here, it might be suggested in passing that a little more attention be given to attractive serving. It is obvious that low cost, limited help and equipment and speed of service are essential but it would only be good business to give greater care to the manner in which food is presented.

Members of the foods class or the home economics club can take turns in making attractive salads and desserts and seeing that they are well displayed on the counter. Pupil help is frequently used and the director can be insistent on the niceties of attractive service.

The decorative possibilities of textiles in the cafeteria are limitless.

Curtains, table covers and wall hangings contribute to the attractiveness of a room and their use offers an excellent opportunity for correlated activities. The selection of type, color and pattern involves interest in art and interior decoration; the practical factors of color fastness and cleaning bring textile chemistry into the problem; the cost factor is a consideration in economics and budgeting; the actual making of the furnishings is a practical application of the theories learned in sewing classes. There are a number of other contributory relationships even in these simple problems involving the use of textiles.

Possibilities in Use of Plants

The use of window boxes, potted plants and ivy ties in with botany classes and some of the agricultural courses. The selection of the proper plants, the choice of the most suitable containers from both the practical and artistic standpoints, correct planting, pleasing arrangement and proper care are practical applications of problems that some of the pupils have encountered in class. An interesting, well-kept aquarium is a further possibility that might be considered along this same line.

It is with considerable hesitation that the introduction of interesting flower arrangements is mentioned. For some unknown reason the phrase seems to conjure up in the minds of many individuals the notion of rare, exotic, hot house blooms, all fabulously expensive. Nothing could be more ridiculous. There are many plants and flowers available that cost nothing but a little thought and time. The simple lesson of making use of what is around is enough to make the effort worth while even if the results are not surprisingly beautiful in themselves.

Botany and nature study interests are, perhaps, the first tie-up with class activity. Art expression in the selection of the containers and in the arrangement of the material is another important relationship.

Bare branches against a light wall can be lovely. Grasses, reeds and rushes of various types, seed pods, autumn leaves and evergreens are possibilities. None of these requires water. The containers should be the simplest wooden boxes, pottery vases and baskets. The materials may be held in place with crumpled wire mesh or by paraffin poured around the stems, the arranging being done while the paraffin hardens. Blocks of wood, given a natural finish and weighted if necessary, with holes bored in various sizes and at different angles make excellent holders.

If satisfactory water holding containers are available many of the green branches will put forth lovely feathery shoots, and even blossoms. Seasonal flowers and foliage are not an impossibility. Pleasing flower arrangements add to a decorating scheme all out of proportion to their monetary cost.

The wall areas of the cafeteria are likely to be bare and bleak. The first thought that comes to mind in this connection is mural design. Murals constitute an excellent solution when the local situation makes it possible.

One objection that is frequently made to mural painting is that it is too permanent for the amateur artist. Professionals make use of a panel or a movable mural. Such panel units can be fastened to the wall and so constructed that the surface can be recovered or changed.

Another plan is to hang large, lightweight frames from the molding, again with a changeable surface. Such units may even be of picture frame size and selected paintings, correctly matted, can be inserted at intervals.

Pupils Can Do Art Work

Any such panel units should be kept simple in design and can easily be constructed in the woodworking shop. The filling of the panels involves the cooperation of the art classes and individual pupils who are particularly interested in such work. The important factor in such flexible units is that of frequent change.

Cork or composition board inserted into these frames makes it possible to use them to exhibit paintings and prints, reproductions or originals. For such display lengths of burlap, monk's cloth or similar material can be hung from the molding by means of a rod put through a casing at the top.

Several public dining rooms make pleasing use of this exhibition idea. Work so displayed should be fairly large and should have a general appeal. Purely informational displays are to be avoided. These exhibitions will have their greatest value if they are selected and arranged by the pupils.

The approach to the cafeteria is often dreary and unpleasant. Along the corridor walls, where the pupils form in line, display boards may be installed and the exhibition can be continued inside. Exhibits of a more descriptive or informative nature may be used in the corridor. Frequent changing of such displays reduces the boredom of waiting in line.

Near the entrance the diverse possibilities of advertising can be stressed. General posters, suggested menus and the day's "special" serve as excellent workshop material for those interested in commercial art and advertising. The conclusions to be drawn from the results of the advertising campaigns can be taken up as class problems in salesmanship and psychology.

Raising Funds for Cafeteria

Funds with which to carry out these ideas need not be great. The various money-making schemes used to provide for other projects may be applied. The cafeteria itself should contribute something to such a fund for, certainly, the effort to make it more attractive is to its own interest.

Much of the success of such projects depends upon the willingness of the director to cooperate whole-heartedly with the pupils, even to the point of modifying the established routine.

Many schools have self-governing bodies with subsidiary committees that are responsible for certain school activities. A committee may be formed with the declared purpose of promoting an attractive cafeteria. Various school organizations may be asked to contribute time and effort —perhaps to take over a certain project for the entire year or to be responsible for a limited period.

We have worked up school pride in such matters as beautiful grounds and care of buildings and equipment and the cafeterias may well be the center of interest for the next campaign. The adult must not be tempted to solve the problem himself. He serves as adviser and consultant, a subtle promoter, with pupil participation and the correlation of all activities as his ultimate goals.

All Share in Hot Lunch

R. B. HASTINGS

Superintendent, Rushville Public Schools, Rushville, Mo.

THE hot lunch program of the Rushville public schools, Rushville, Mo., is made possible by the cooperation of four agencies, namely, the Rushville Community Club, the Social Security Commission of Missouri, the Work Projects Administration and the parents.

The community club, composed of local women and organized for the purpose of promoting community improvement, is serving as sponsor of the project. The members of the club cheerfully went to work to provide stoves, cabinets, dishes, utensils and other items of equipment essential to a kitchen. Many donations were received from various sources and many items were purchased from funds raised by the club. This group of women has also furnished many food commodities necessary to provide a balanced and varied diet.

The Social Security Commission of Missouri has generously provided food from surplus commodities. It has furnished white flour, graham flour, oatmeal, evaporated apples, raisins, prunes, fresh oranges, lima beans, navy beans, butter, lard, corn meal, pork, canned peaches and several other items. The commission has also provided menus worked out by a trained dietitian.

The Missouri W.P.A. gave its approval and provided a cook and two assistants for the project. All kitchen employes are required to pass a food handlers' examination and to furnish a health certificate. The cooperation of the Work Projects Administration definitely solved the labor problem for the program.

Surplus commodities being carried in by the custodian and pupil assistants.

To obtain the cooperation and support of the parents, a letter was sent to the home of every boy and girl in the school. The parents and their children were invited to participate in the lunch program. It was explained in the letter that there would be no charge whatever for the meals, but that the project would be operated entirely on a donation basis. The parents were invited to donate whatever they cared to and the amount also was left to their judgment. Some of these items included potatoes, canned vegetables, canned fruits, eggs, milk, hams, poultry, bread, cookies and oil for the stoves; some of the parents have given money.

Every child who desires to have lunch is served regardless of the ability of his parents to contribute. The names of those who make contributions from time to time are not made public, and every effort is made to guard against any discrimination between children of contributors and those of noncontributors; also, there is no distinction between children of parents who require assistance and those whose parents are self-supporting.

During the first week of the program, 555 meals were served, or an average of 111 each day for the five school days. The second week, 621 lunches were served. The actual cost of serving these 621 meals, exclusive of donations, was 79 cents. The third week, approximately 700 meals were served at a total cost, exclusive of donations, of 29 cents.

There is no cafeteria. The boys and girls are served at their desks by high school girls who volunteer their services. A teacher is in charge of each room at lunch time. In any given room, no one begins eating until all have been served and a prayer of thanks has been offered. The pupils are encouraged in the practice of good manners and are taught to eat slowly and to chew their food well.

After they have finished eating, the waitresses return, gather up the dishes and silverware and return them to the kitchen. Every knife, fork, spoon and dish are first cleaned in hot soapy water, are next doused in a solution containing a disinfectant and then into a boiling hot rinse water before being dried.

Besides providing nourishing food, the lunch project has done away with lunch hour confusion, has solved the lunch pail and lunch paper problem, has promoted a happier relationship among pupils and has helped to create a better understanding and cooperative effort on the part of the parents. Furthermore, it has enabled the school to broaden its field of service to the community.

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Teaching Film Takes Its Place

A Broad View of the Picture

W. W. WHITTINGHILL
Director of Visual and Radio Education, Detroit

A RECENT newspaper article stated that motion pictures are the greatest form of entertainment in this world. They are a boon to humanity. No other medium affords as much mental and even physical relaxation to as many people. These statements relate, of course, to the theatrical film and refer to the 80,000,000 movie-goers who are in attendance each week. The effect of this looking and listening is recorded somewhere, somehow on these individuals.

Teachers have been using motion pictures in auditoriums and classrooms for approximately twenty-five years. There are many varieties of films, not only in size and content, but also in silent and sound types. The first films used by teachers were much like theatrical films in content, in size and silent patterns. Those early motion pictures brought many derogatory comments from skeptical educators and the tax-paying public. It was not uncommon to hear that films were merely frills or fads and, certainly, that educational expenditures for films and equipment were a waste of public money.

Three Major Developments

However, a few things happened—administrators, teachers and the lay public went into huddles to determine for themselves whether or not educational films might not be used for several purposes and perhaps have many values. The record shows three major developments. First, theatrical films were being used and, certainly, not all of them were bad enough to be a total loss. Some of these films aroused a desire in those who saw them to find out something more about life. Second, business and industry were producing films and using them in their regular program of training men and merchandising products. Third, some of the educators who generally lead the parade, that is, those men who had the foresight and the courage of their convictions, decided that the use of motion pictures in education might not be so weak and disturbing as had been indicated. It was not surprising, therefore, to have many more educators and members of the lay public later join the first group that made the research investigations.

Motion Pictures "Grow Up"

What happened? Equipment and films were rented or purchased and, suddenly, from out of the wilderness, this program of motion pictures began to function in education and came to be recognized as an integral part of school activities. Principals and teachers informed themselves about the potentialities of motion pictures in education. This growth in teacher education and the growth and improvement of film production and manufacture of equipment helped to establish our present program of motion pictures in education.

So today, motion pictures are used in the schools throughout the nation. These films provide experiences for children and adults that are not available in any other form and that make possible a sustained interest in our social progress. More exploratory programs will be directed and research investigations will continue. New innovations in educational procedures will result from the continuous use of motion pictures.

Many millions of children are now attending school. Each must be provided with a rich, individual and effective social training. Many useful teaching devices and methods aid in extending the horizon of learning for youth and adults. Motion pictures bring the outside world into the classrooms. The breath of industry and business and the pulsations of community spirit give more life to the activities of the school.

It is essential that the curriculum be properly analyzed and reconstructed at intervals so that the needs of home, school and community may be considered, understood and served. Motion pictures should be produced accordingly. The films may be either silent or sound. Some will be in natural colors; others in black and white. Productions will be short for some areas; other films will be longer, perhaps of the synthesis patterns. Music education will necessarily use many sound films and perhaps art education will have occasion to use more silent films.

Both Types Have Advantages

There should be no more conflict regarding the merits of silent and sound motion pictures than there is regarding the value of any other teaching aid that is employed in the curriculum from kindergarten through the university. There is, however, an important challenge to educators to develop new technics for the utilization of the motion pictures now available. There is also a challenge to the producers of motion pictures to meet the demands of our new social structures and there is a challenge to equipment manufacturers to produce newer types of projectors.

The ever-improving program will be planned and directed cooperatively. Films will be produced in accordance with the standards of a broad and flexible curriculum. Motion pictures and other teaching aids will always be used in education. We will continue to look, listen and learn through ideas that are presented by motion pictures and used by resourceful teachers.

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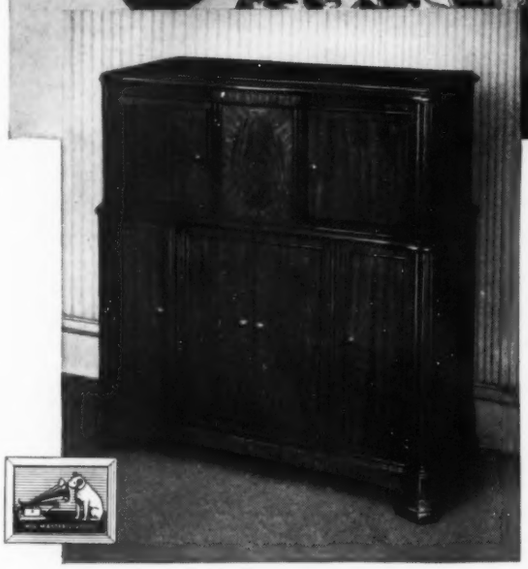

Model V-225 is available in either walnut or mahogany, substantially built for long service.

TYPICAL of the superb quality available to every school in 1942 RCA Victrola models and RCA Victor Radios is this remarkable development of RCA Laboratories. The amazing new Magic Brain RCA Victrola with Tandem Tonearm now makes it possible to play records on both sides without turning them over. It provides two full hours of uninterrupted record music, automatically—without attention.

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No lid to lift—no ornaments to move.

No more objectionable mechanical noises.

No needles to worry about.

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Records last indefinitely.

Records play, stop, change—automatically.

FOR EXTRA QUALITY AT NO EXTRA COST —buy RCA VICTOR!

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Educational Department (N-10)
RCA Manufacturing Co., Inc., Camden, N. J.

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RCA Victor

AUDIO VISUAL SERVICE FOR SCHOOLS

Educational Dept., RCA Manufacturing Co., Inc., Camden, N. J.
A Service of the Radio Corporation of America

The Case for Silent Films

GEORGE A. STRACKE

Visual Education Specialist
Flint Public Schools, Flint, Mich.

SILENT or sound films? Each type fills a definite need although, contrary to popular belief, the stronger case can be made for the silent film of the factual type.

The lecture type of sound film is enjoying the greatest vogue at present. Prepared by an authority on the material treated in the film, the lecture brings to the classroom the master teacher's background in the particular subject field. Important features in the development of the film lesson are stressed in proportion to their importance and no step in that development can be overlooked or missed. The explanation is always the same and at the proper point because the discussion has been carefully synchronized with the material.

Of secondary importance is the fact that there is no distraction arising from movement or facial expression of the teacher; the pupil is able to concentrate his entire attention on the presentation of the lesson.

However, the unvarying presentation tends to limit the usefulness of the lecture type of sound film. The methodolgy of the use of visual aids frequently makes it desirable that a film be used two or three times in the same class. The running commentary that will fit one situation often may not be as satisfactory in another. Then, too, should it be desired that the same film be used at different grade levels or in different subject matter departments the vocabulary of the commentary or the point of the discussion cannot be varied.

True sound films are those in which sound is an integral part of the concept or idea being portrayed. The true sound film brings the verisimilitude of reality. Its greatest value and its greatest danger lie in its dramatic presentation. Only through the use of this type of film can the pupil get the full effect of such processes as the production of steel in the blast furnaces and rolling mills, for example. Dramatization and the faithful unaltered reproduction of events and scenes are the wide fields of opportunity for the use of this type of film.

The danger in the use of this type of sound film is not in the film itself but in its preparation. The greatest use of the dramatic film is being made today in Germany for the indoctrination of children with the Nazi ideal. We have had the experience in this country of having a documentary film enjoying national acclaim suddenly withdrawn from circulation and reissued in revised form because critical historians have discovered that liberties have been taken with documentary materials.

Silent films have two advantages, mechanical and pedagogical. Until school authorities realize the necessity of supplying projectors in sufficient quantities, the ease of transporting and setting up projection equipment for silent films will remain a major mechanical advantage.

Silent films are made with two sets of sprocket holes and are less likely to stop accidentally. They operate at a slower speed than sound; therefore, the standard reel has more actual picture. The threading process in the silent projector is simpler.

When cost must be considered, silent films have the advantage over other type. The silent films cost less to produce and sell for approximately half the cost of sound films. Projection equipment is relatively inexpensive, as is the upkeep.

Pedagogical advantages of the silent film, however, outweigh all others. Of these, the most important again reverts to the educational function of motion pictures—they are visual aids for the enrichment of classroom teaching. The silent film leaves the teaching burden in the hands of the teacher and, being silent, tends to disperse the show atmosphere. The teacher knows the needs, aptitudes, background and preparation of the pupils for the film that is being used. His presentation can be gauged for a specific teaching purpose. He can organize one presentation for the use of a film to introduce a unit; another, should he wish to repeat the film for amplification or review, and a third, in using the film to summarize a unit. The same film may be used in several departments at the same level or may be used at various grade levels, the teacher adapting his vocabulary and discussion to the immediate situation.

Just as two teachers will not use the same text in the same manner, two teachers will not use the same film in the same manner. Thus, the individuality of the teacher is preserved. This factor too often is lost sight of in many educational developments. Successful teaching, after all, resolves itself into close pupil-teacher relationships and arouses the interplay of mental stimuli which preserve the personalities of both teacher and pupil. By permitting the classroom teacher to retain the control of the lesson presentation, the silent film retains its correct place as a teaching aid.

A wider variety of material lends itself to silent film presentation than to other types. Numerous natural developments, mechanical and other processes, animations of nonobservable processes, time-lapse and stop-motion photography, in none of which is sound inherent, all are materials that are logically silent film material.

Just as two teachers will not use the same text in the same manner, two teachers will not use the same film in the same manner. By permitting the teacher to preserve her individuality and to control the lesson presentation, the silent film is a somewhat more flexible teaching aid than is the sound film, the author contends

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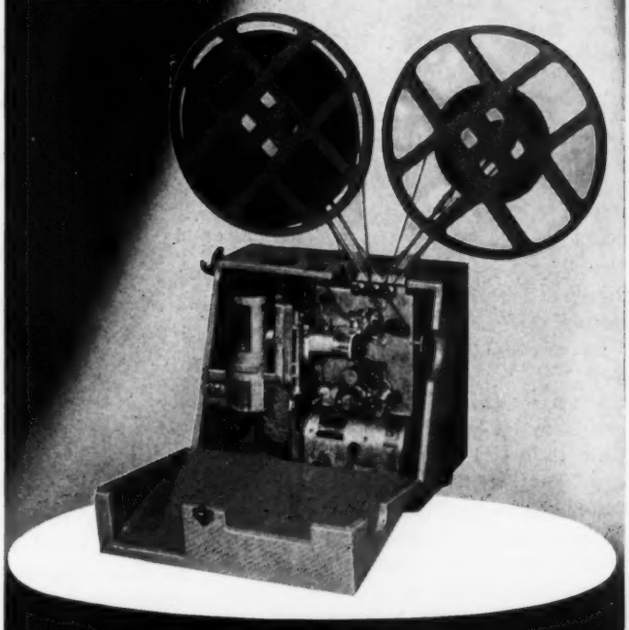

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"School of the Air" to Be Incorporated Into the Mexican School Curriculum

Mexico will officially incorporate the Columbia Broadcasting System's "School of the Air of the Americas" into the curriculum of all of its schools, it was announced at the recent international conference of the "School of the Air" held in Mexico City. It is hoped that before long every one of Mexico's 10,000 classrooms will be equipped with radio receiving sets to enable them to use the air school programs.

At this meeting the prophesy was made by Dr. Luis Sanchez Ponton, Mexican minister of education, that the extension of the "School of the Air" to the entire Western Hemisphere may result in all of the American nations becoming bilingual. Inter-American understanding and continental cooperation cannot become effective realities until all of the American countries, including the United States, use both English and Spanish as their mother tongues, Doctor Ponton believes.

Music Appreciation Hour Starts Fourteenth Season

The National Boardcasting Company's Music Appreciation Hour, conducted by Dr. Walter Damrosch, will begin its fourteenth season on Friday, October 17, from 2 to 3 p.m. Eastern Standard Time.

In accordance with his usual procedure, Doctor Damrosch will divide the concerts into four series of half hour programs to be heard on alternate weeks. Series A and B are intended for grades 4 to 8 and Series C and D, for junior and senior high school groups.

This year, the Series A and B concerts will be broadcast in the same half hour period on alternate weeks. Thus, it will be possible for classes to listen each week at the same period—Series A one week and Series B the next, thereby taking two courses in a single season. The Series C and D concerts will also be handled in this manner.

Catalogs of Patriotic and Folk Music Issued by RCA

Two catalogs of educational records of folk music and dances of the Western Hemisphere have recently been issued by the RCA Victor educational department.

One folder, entitled "Patriotic and Folk Music of the Americas," lists recordings of national anthems, dances, folk songs and patriotic music of Central, South and North America. It also includes an album of speeches of American presidents.

The other folder, "Folk Dances, Singing Games and Old Fashioned Dances," is timed to meet the revived interest in American folk songs, dances and ballads.

CHINA'S SINGING CHILDREN

In China, singing has become part of the child's upbringing. The children put the spirit that dominates all Chinese youth into their singing. Recently, Dr. Walter Damrosch urged the use in American schools of the albums of Chinese recordings that have been released by the United China Relief. The recordings include instrumental and folk music. They can be obtained from United China Relief headquarters, 1790 Broadway, New York City.

South Carolina Adds Films

Twenty new teaching films and 25 new industrial films have been added to those already on file in the audio-visual aid bureau of the extension division of the University of South Carolina. The new films are available for use all over the state. Science records, study guides to use with teaching films and the 275 films already on file in the bureau are also available to South Carolina schools.

Film Releases

A Trip to the Sky—This film shows the position of the earth in the universe; records a journey to the moon, Mars, Saturn and the twin-star, Alpha, and explains how astronomical distances are measured with a telescope. 16 mm., silent, 10 minutes. Bell & Howell, Inc., Chicago.

Camera Sketch of Costa Rica—Picturing life as it is lived in Costa Rica, with such outstanding events as festival days, the government sponsored lottery and sham bull fights. 16 mm. color, silent. 2 reels. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York City.

Puerto Rico, Haiti and Havana—A 1 reel color film depicting San Juan, Puerto Rico's modern capital; views of the Haitian cape with the famous citadel, Sans Souci, and the boulevards, public buildings and beaches of Havana. 16 mm., silent. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

Atlantic—An all-diagram film explaining the history of the Western Hemisphere in terms of relationships and rivalries among the countries that border the Atlantic Ocean. 16 mm., silent. 21 minutes. Bell and Howell Company, 1801 Larchmont Avenue, Chicago.

Unseen Worlds—The story of the RCA electron microscope, which provides magnifications of from 50,000 to 150,000 diameters. The development and functions of the electron microscope, including its operation, are pictured. Some of the electron micrographs produced by the instrument are flashed on the screen. The last scenes illustrate some of the uses of the microscope. 16 and 35 mm., sound. 1 reel. RCA Manufacturing Co., Inc., Camden, N. J.

NEW and valuable TOOL
for all branches of
SPEECH TRAINING

- ✓ Immediate Playback
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- ✓ No Expense for Records
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These four features make the new Western Electric Mirrophone the ideal instrument for your use in speech correction and voice training work. In striking fashion, it demonstrates speech imperfections and peculiarities—shows students exactly how their voices sound to others.

It's quicker

Speak for a minute into the microphone—throw one switch—and the Mirrophone immediately repeats your words. No waiting, no complications, no wasted time.

It's better

Your voice or other sounds are reproduced tone for tone, pitch for pitch with amazingly natural fidelity.

It's more economical

The Mirrophone records sound electrically on a magnetic steel tape, plays back as many times as you wish. When a *new* recording is made, the previous one is automatically erased from the tape, which may be used an infinite number of times. No discs are used—no expense for record material.

It's easier

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Designed by Bell Telephone Laboratories and manufactured by Western Electric—maker of Bell Telephones—the Mirrophone is a *quality instrument* through and through. Yet it's moderately priced. For complete information, write to:

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195 BROADWAY, NEW YORK, N. Y.

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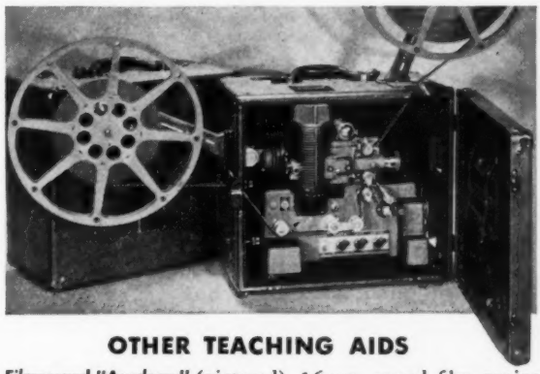
Filmosound Library's new series, Our Colorful World, brings beauty spots and wild life of America and the world to the school screen *in full natural color.* Write for film lists . . . or for *complete* catalogs—one each on educational, recreational, and religious films.



OTHER TEACHING AIDS

Filmosound "Academy" (pictured), 16mm. sound film projector widely used in schools. Projects silent films, too. Easy to use. Lastingly dependable.

Filmosound Accessories to extend the scope of your Filmosound. B&H Combination Recorder and Record Player permits making your own disc recordings. B&H Microphone facilitates commentaries on silent films.

Castle Films on world news, adventure, and travel are available through B&H Filmosound Library. Consolidate your orders for convenience. Bell & Howell Company, Chicago; New York; Hollywood; Washington, D. C.; London. *Est. 1907.*

SEND THE COUPON FOR USEFUL MATERIAL

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Please send details on: ( ) Transcriptions; ( ) Reproducing System for Transcriptions; ( ) Color Films; ( ) Filmosounds; ( ) Filmosound Accessories; ( ) Castle Films.

Send ( ) Educational, ( ) Recreational, ( ) Religious Film Catalog (free to 16mm. sound film projector users; 25¢ each to others); ( ) Utilization Digest.

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Chalk Dust Fred Moffett

OCTOBER ODE

The floors are waxed, the windows gleam,
The halls are full of cheer,
A renovated academe
Proclaims that fall is here.
That's October.

With ready cash the budgets brim;
Alas, that they must fade.
The faculty with pep and vim
Strides forward, undismayed.
That's October.

The football team is on the jump
With high esprit de corps.
Nor do they fear the future bump,
The busted head in store.
That's October.

The little kiddies romp and grin
Each pleasant autumn day;
They toil not, neither do they spin;
Exams are far away.
That's October.

No irate parents froth or storm
With fancied injury;
They haven't gotten back to form
From summer lethargy.
That's October.

O, schoolmaster, sleep on with zest
Till autumn days are sped;
Relax, good sir, you'll need the rest
For times that lie ahead.

● ●

DEAR SUPERINTENDENT: I am a citizen of repute and a taxpayer. For six months I have been living next door to your school playground and every day I acquire a deeper distaste for you amounting to nausea.

Why is it that you fill the playground with a horde of howling hyenas who invade my garden, eat my fruit trees and carry away my clothesline with six pairs of drawers? Why do you let 247 balls of various kinds come over your insufficient backstop? If you would spend more time guarding my property and less talk about youth activities, it would be better for you. When I bought this property I was told that the school board would probably take it over at a nice profit. They have taken it over, all right. Either you build a 10 foot fence or else get out here and shag these balls of which I have had more than a sufficiency.

THE GUIDANCE SONG

O give me some graphs and some cabinet files
And a few I.Q.'s either high or low;
Some medians, norms and some juveniles
And neatly, completely a-guiding I'll go.

Let scholars squander the midnight oil
With their musty books and their dreary themes
They work with the tools of worry and toil
I deal with the tissue of undreamed dreams.

Johnnie wants to be a cook, or else a millionaire. Johnnie's folks are willing, but how and when and where? What's the proper college and when does it begin? Which has good fraternities and how can one get in?

Mable has the boy craze, strange phenomena! Thinks in terms of romance, not of algebra. Willie wants to see the world; school is just the bunk. What's the use of history—one more line of junk! Dick has brilliant parents, why is Dickie dumb? Is there any remedy when Oscar sucks his thumb?

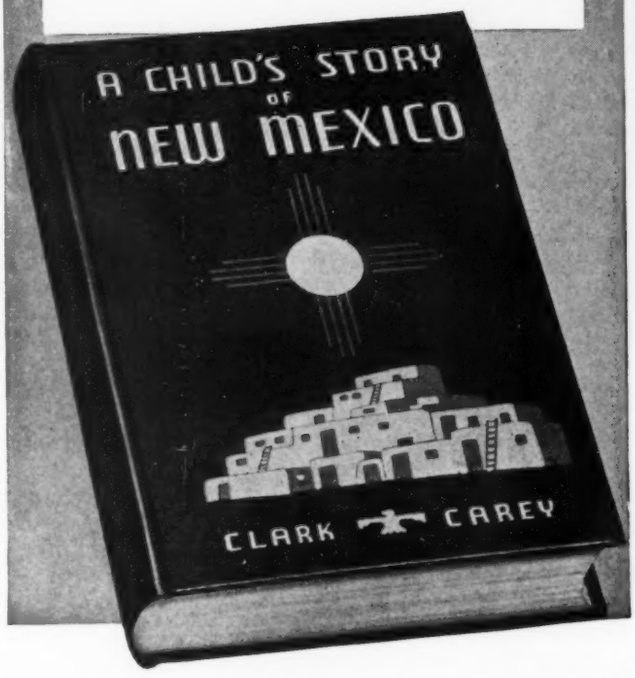
Teachers there are who must pull and prod
As they teach events which are past and dead;
They travel paths that are already trod
While I point the goals that may lie ahead.

In verbosity the pedants prate
Of age old schemes of laissez faire,
But the world may be saved (if it's not too late)
By Guidance, the Pathway to Who Knows Where.

Who directs the senior play, chaperones the band, sews the curtains for the stage, keeps the kids in hand? Who promotes publicity for the football boys? Who must run the candy sale and try to keep his poise? Blame the Guidance Teacher if the thing's a blob. Let him fix the wreckage; that's part of the job.

Memo: Please psych Millie whose ego is in strife. Millie's mater says to tell her child the facts of life. Mother has a bridge date, it's father's holiday, and some where in the shuffle Bob has lost his way. Education's fads and frills can't be justified, but through this maze of crazy days someone's got to guide.

WHY THEY BOUND "NEW MEXICO" IN PX CLOTH...



PUBLISHER . . . *University Publishing Co.*
DESIGNER . . . . . *Terry Townsend*
BINDER . . . . . *Kingsport Press*
MATERIAL . . . . . *PX Cloth*

TWO YEARS AGO the University Publishing Company released two history books. Both were bound in PX Cloth. And so well did this washable bookbinding fabric stand up under actual classroom use, it was chosen again this year when "A Child's Story of New Mexico" was added to the series.

Books bound in PX Cloth are favorites of teachers and educators everywhere. They're able to take plenty of hard, day-to-day wear. They can be scrubbed clean with soap and water. They look better, and last much longer, than books bound with ordinary materials. And you'll find they make classroom work easier, because they're stronger, cleaner and more sanitary.

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See reproduction of various woods in natural colors in Sweet's Catalog, page 17/40.

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News in Review

Program Schedule for N.A.P.S.B.O.

A large attendance drawn from all sections of the country is expected at the thirtieth annual meeting of the National Association of Public School Business Officials in Atlantic City, October 13 to 16.

National defense will be under discussion at the Tuesday morning meeting, at which Charles H. Elliott, New Jersey Commissioner of Education, will address the session on "What the Schools of New Jersey Are Doing for National Defense."

Dr. Arthur B. Moehlman, editor of The NATION'S SCHOOLS and professor of business administration, University of Michigan, will open the Tuesday afternoon sectional meeting on retirement for noncertificated personnel with a talk on "Retirement Programs for Noncertificated Personnel." Other speakers at this section include T. G. O'Keefe, secretary of the School Employes Retirement System for Ohio; J. M. Clifford, secretary, Michigan Teachers' Retirement Fund Board, and H. H. Baish, secretary, Pennsylvania School Employes' Retirement Board.

Another sectional meeting on Tuesday afternoon will be devoted to the subject of "Liability for School Accidents." Speakers will include Herbert J. Stack, director of the center for safety education, New York University, who will talk on "Safety Engineering for the Reduction of Accidents"; F. R. Wegner, superintendent of schools, Roslyn Heights, Long Island, N. Y., whose subject will be "Protection and Insurance for Athletic Injuries," and Drummond J. McCunn, assistant superintendent of schools, Pasadena, Calif., who will describe the "Practical Administration of School Board Liability in California."

A "Cooperative Training Program for Clerical and Secretarial Positions in the School System" will be outlined by John W. Edgemond, secretary and auditor of the board of education, Oakland, Calif., at the Tuesday evening round table on personnel problems.

At the general session on Wednesday morning, H. C. Roberts, secretary-business manager of Sioux City, Iowa, will present the report of the certification committee. Among the speakers at this session will be Bruce A. Findlay, supervisor of visual education, Los Angeles, whose topic is "The Visual-Eyes-Ing Ear-A."

Thursday morning will be taken up with sectional meetings on buildings and grounds, finance and accounting and purchasing. Delegates attending the section on buildings and grounds will hear, among others, discussions of "Safety Factors in Construction of Buildings and Grounds," by Arthur A. Knoll, business manager, Long Beach, Calif.; "Appraisal of Buildings for Insurance Purposes," by A. S. Nibecker Jr., architect and business manager, Los Angeles, and "Preventing Damage Through Vandalism," by Harold D. Hynds, superintendent of plant operation and maintenance, New York City.

A paper on the "Self-Sufficiency of America Through Chemistry" will be presented by Theodore G. Joslin, director of the public relations department, du Pont Company, Wilmington, Del., at the closing session on Thursday afternoon.

COURT DECISIONS

South Dakota Textbook Case, 1941

An attempt in South Dakota to obtain free textbooks for pupils attending private or parochial schools met with failure when Judge A. B. Beck of the First Judicial Circuit Court turned down the request on the grounds that the "defendant school district has neither the right, the power nor the duty to furnish the free use of textbooks to plaintiff Leonard Haas, while not attending a public school established and maintained by defendant School District."

In the past, the attorney general of South Dakota has ruled that public money could not be used to furnish textbooks, supplies, tuition or transportation to pupils attending private or parochial schools. This case was brought by the guardian of a parochial school pupil to force Independent School District No. 1 of Yankton, S. D., to supply him with free textbooks in accordance with the South Dakota law for public schools.

In attempting to interpret the law to include parochial school children, it was argued that the phrase "Independent School District" referred to a geographical unit rather than a corporate unit, and that the free textbook law should thus include all children who attended any school within the school district's area. Judge Beck stated in his decision that "the legislature of this State had in mind an Independent School District as a corporate unit, solely, rather than a school district in a geographical sense and that 'the pupils of such district' must mean the pupils attending the schools maintained by such school corporation. . . ."

This interpretation seems to be in accordance with the state constitution, which strictly prohibits the use of public funds to aid any sectarian school. It reads: "No appropriation of lands, money or other property or credits to aid any sectarian school shall ever be made by the state, or any county or municipality within the state . . . and no sectarian institution shall be allowed in any school or institution aided or supported by the state." (Article X, Section 13.)

School Districts Liable

Michigan school districts, as owners under the Motor Vehicle Act of 1915, are liable for the negligence of their agents and employes in the operation of school buses and for the faulty condition of the transportation equipment if any injury or damage results to the person or property of others because of such condition.

This ruling was handed down by the attorney general of Michigan in interpreting the effect upon school districts of the decision of the Michigan supreme court in the case of Miller *v.* the Board of County Road Commissioners.

In this case the county was held liable for injuries resulting from a motor vehicle accident caused by the negligence of a county employe.

Ruling on Religious Instruction

Any religious instruction in a Missouri school, even if it is only inferred by symbols or by the segregation of pupils into denominational groups, would automatically prevent that school from receiving public money, it was ruled by the Missouri attorney general's office recently. This ruling followed the sweeping decision handed down by the supreme court of Missouri that the public schools must remain completely separate from any sectarian influence. It is estimated that between 40 and 50 school districts would be affected by the ruling.

LEGISLATION

Religious Education Law Vetoed

A bill passed by the California State Legislature at its last session granting pupils time off from school for religious education has been vetoed by Governor Culbert L. Olson. The bill had provided that elementary school children should be allowed one hour per week off from school, if desired, in order to receive moral and religious instruction in their chosen faith.

Although admitting that character building is a part of the school program, Governor Olson pointed out that "the mixing of religious denominational teaching as a part of the school work, with school credits given to pupils who may be excused from school for that purpose . . .

ENROLLMENT DETERMINES THE COST

NEW SLIDING SCALE FOR "SCHOOL LIST" PARAMOUNT TITLES

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Under 251	$12.50	$10.00
251-500	15.00	12.50
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Over 750	20.00	17.50

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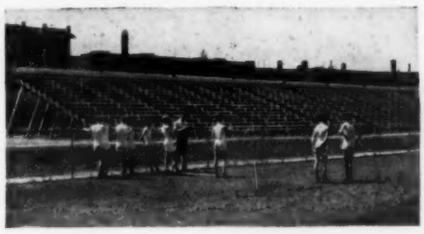

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We manufacture Wood and Steel Portable Bleachers; Grandstands; and Steel Folding Gymnasium Stands. Write today for our illustrated and informative bulletins.

UNIVERSAL BLEACHER COMPANY
CHAMPAIGN, ILLINOIS

For Windows in Multiple and for Center Pivoted Sash

The DRAPER X-L SHADING UNIT

Classroom windows require shading for maximum light entrance. Lighting from top of window can be used more often and with much greater distribution than when shade is regulated from the bottom of the window.

Darkening a group of windows, no matter how great the width, can be as simple and practical as overlapping shade cloth on the casings of an ordinary size window. This is accomplished by the Draper X-L Shading Unit which will overlap a group of shades, one on the other and overlap the space between windows and wall. No special fixtures are required, except the inverted T-shaped bracket contained shield to which the shades are mounted above the window opening. All windows in classrooms that are to be darkened should have dual shading.

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Premier **SPEEDEE**
Vacuum Cleaner

SOLVES the School Cleaning Problem!

School cleaning is a big job, but Premier's rugged Speedee Commercial cleaner makes light work of it! More than powerful enough to pick up litter quickly and easily, it is compactly designed for easy mobility and for getting around desks, chairs, through aisles . . . many places where larger cleaners would be balked. There is no dirty bag to clean, for strong suction takes dust, dirt and litter directly into the large metal container. The Speedee's low price will get your O.K. too!

SPECIFICATIONS:

Motor: ¾ H. P. universal type, air-cooled

Bearings: Ball-type, greased for life

Weight: 30 pounds

Dimensions: 24" high, 13" in diameter

Vacuum: 45" maximum, developed by multi-stage fans

Finish: Durable crinkle, chrome trim

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Write for descriptive literature, full information.

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is contrary to the spirit, if not the letter, of the provisions of our State Constitution, which are intended to maintain complete separation of church activities and the public school system."

MEETINGS

National Safety Congress

One section of the 1941 National Safety Congress and Exposition, which will be held in Chicago October 6 to 10 will be devoted exclusively to "Child Education." The general theme of the congress, which is expected to draw an attendance of 10,000 safety leaders from all over the country, is "Help-Defense—Stop Accidents."

On Monday afternoon delegates attending the child education section will hear a review of the progress made in safety education during 1940 and 1941. Among the speakers at this meeting will be G. H. Reavis, assistant superintendent in charge of instruction, Cincinnati public schools, who will talk on "Progress in Curriculum Planning for Safety."

The Tuesday morning session will be devoted to a general discussion of home safety in the school program, while the topic for Tuesday afternoon will be "Administration and Evaluation of Safety Education." The responsibility of the principal and the superintendent for the administration of safety education will be discussed by Fred L. Biester, principal, Glenbard Township High School, Glen Ellyn, Ill., and Chester F. Miller, superintendent of schools, Saginaw, Mich. Later in the afternoon a panel of pupils representing various types of communities and safety problems will appraise safety education.

The contribution of the safety curriculum to national defense and the school's responsibility for traffic safety will be discussed at the Wednesday sessions. On Thursday morning there will be a panel discussion on driver education and training and the Thursday afternoon meeting will conclude the program with a symposium on utilizing community resources in the school program.

Federation of Teachers

The convention of the American Federation of Teachers held in Detroit August 24 to 27 petitioned Congress to establish a permanent program of adult education and urged an expansion of W.P.A. teaching quotas so that "5,000,000 nonAmericans may be speedily inducted into the ranks of loyal American citizens." The delegates also passed a resolution condemning the Rapp-Coudert investigating committee of the New York State legislature because it refuses to witness the "right of counsel, the right of cross-examination and the right to obtain a transcript."

The convention refused to seat 131 delegates from the Teachers Union of New York City, the New York College Teachers Union and the Philadelphia Teachers Union, which had been expelled from the federation because of alleged communist sympathies.

Social Studies Group Meets

The three day convention of the National Council for the Social Studies, a division of the N.E.A., will be held in Indianapolis, November 20 to 22. Two novel features will supplement the usual program of addresses and discussions. These are: (1) 17 simultaneous seminar study groups on practical classroom problems in teaching the social studies, and (2) a symposium on citizenship education sponsored jointly by the National Council and the National Foundation for Education in American Citizenship.

Attention will also be focused on the presentation and appraisal of the recently published twelfth yearbook of the council, "The Social Studies in the Elementary School."

SPAL DOES 3 JOBS AT ONCE!

Spal cleans by new Expurging Action

Spal gives floors a Lustrous Polish

Spal leaves a film of Surface Protection

MAINTAINING school floors correctly isn't the long, costly job it used to be. With Spal Liquid Scrub Compound you can now clean the floor, give it a lustrous polish, and leave a film of surface protection that reduces the number of necessary cleanings. You do *all 3 jobs* at the same time, in *one,* instant-action operation.

Spal is an amazing cleanser, probably unlike anything you've ever used before. It offers an entirely new method of cleaning—a new expurging action that dissolves dirt, draws it to the surface and *floats* it away. A specially developed light filler leaves a non-slippery surface film that reveals the true beauty of the floor.

To obtain top-notch economy and streamlined maintenance, try Spal *now.* You'll find its 3-way labor saving action the best investment you can make for your floors.

Spal is safe for all types of flooring. Approved by leading flooring manufacturers.

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ADMINISTRATION

American Education Week

November 9 to 15 will mark the twenty-first annual observance of American Education Week, based on the theme: "Education for a Strong America." The daily topics for the week are as follows: Sunday, "Seeking World Order"; Monday, "Building Physical Fitness"; Tuesday, "Strengthening National Morale"; Wednesday, "Improving Economic Well-Being"; Thursday, "Safeguarding School Support"; Friday, "Learning the Ways of Democracy," and Saturday, "Enriching Family Life."

Packets containing a supply of posters, leaflets, stickers and a 32 page manual are available from the National Education Association for classroom use for kindergarten, primary and elementary grades, junior high school and senior high school.

School Population Declines

A decline of approximately 160,000 in the school population of America for the term 1941-42 was predicted by the U. S. Office of Education as the schools reopened in September. The office estimated that the number of pupils would total 31,566,000 in the coming year as against the 31,726,000 who attended classes last year. This decrease, the office of education stated, is due to the low birth rate from 1930 to 1938. The total school enrollments, as calculated by the education office, includes more than 2,000,000 persons who will attend evening and part-time schools; business colleges; nurse-training institutions, and private trade schools.

PUBLICATIONS

Cleveland Heights Schools

Citizens of Cleveland Heights, Ohio, can read the story of the activities of their schools in the attractive booklet "Presenting Your Schools." The idea of the booklet, it is stated in the foreword by F. L. Wiley, superintendent of schools, was to set forth for all parents, citizens and taxpayers in brief, readable and pictorial form the essential features of the work of the schools. The information in the booklet was compiled by teachers, principals and supervisors working on the following committees: editorial and printing; editorial assistance in writing copy; assembly and layout photography, and financial.

Publicity for Library

Modern versions of the old-time handbills are being used by the public library of Newark, N. J., to publicize its large collection of books on the many aspects of national defense. The brightly colored flyers are designed to appeal to young and old and to all tastes. They are distributed from such centers as high schools, vocational schools, social and study clubs and factories.

How to Play Six-Man Football

The official "Six-Man Football Rule Book and How to Play Handbook" for 1941 has recently been published by the National Six-Man Football Rules Committee, 45 Rose St., New York City. Complete rules for the playing of six-man football; illustrations and diagrams of plays; sections on how to play, and the history and growth of the game are contained in the book. Also included are the rules for six-man baseball and six-man touch football.

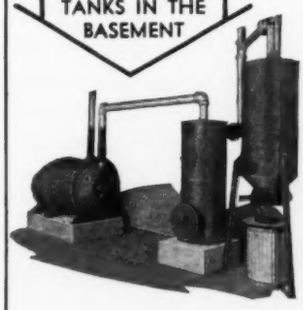
Booklets on Civil Defense

A number of booklets, selected from among the large number of British government publications on civil defense, have recently been made available to the public by the committee for national defense of the University of South Carolina. Included are air raid precaution handbooks and information about decontamination and first aid for gas casualties.

"ECONOMY AND CLEANLINESS FOR A LIFETIME"

WITH SPENCER CENTRAL VACUUM CLEANERS

ALL DIRT AND DUST IS COLLECTED IN TANKS IN THE BASEMENT



"Every school that has been built in the last eight years is Spencer equipped. We are absolutely convinced that this is the best system of cleaning schools."

"There is no end to the saving in labor and time. We save $1,000 a year cleaning ventilating screens alone."

"Installed in 1932—not the least bit of trouble. Save 50% of janitor's time compared with push-broom method."

"It has eliminated oiling of floors, reduced the dust infection hazard to an absolute minimum."

"We have Spencer machine No. 1962 in our school which has served us well a long time. (Since 1914!)"

Statements of prominent educators in your vicinity will be furnished on request.

ASK FOR THE NEW BOOKLET AND LIST OF MORE THAN 2500 SPENCER EQUIPPED SCHOOLS

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CENTRAL AND PORTABLE VACUUM CLEANING SYSTEMS

THE SPENCER TURBINE COMPANY, HARTFORD, CONN.

SAFETY

From Home to School in Safety

Additional safety was assured pupils of Chicago public schools when the new term opened in the fall by the use of the "safest route to school" maps recently devised by the Chicago Motor Club. Street diagram forms upon which the home, the school and conditions surrounding them can be shown were issued to every one of the city's half million school pupils. The safest route for each pupil to follow from the school to his home was traced at school in order to take advantage of police and patrol protection and, thus, route individuals safely to the border of the school zone.

Parents were requested to select the safest route from the border point of the school zone to the home; the entire route is drawn as a continued line between home and school.

In endorsing the motor club's plan, A. H. Pritzlaff, director of safety of the Chicago schools, stated that the safest route should be followed even though it might also be the longest route.

"AND NOW MAY I SEE YOUR WASHROOMS?"

When you guide fond parents on a tour of inspection through your school, are you proud to show them your washrooms? Or do you hurry by these rooms, hoping that there will be no embarrassing questions about the washing facilities?

You're proud to show off your washrooms if they're equipped with Ivory Soap Dispensers. For these gracefully designed dispensers are as efficient as they look. They provide an especially pleasing, sanitary means of washing faces and hands by delivering a soap famous for its purity, rich lather and gentleness. Pure, gentle Ivory Soap, dispensed in convenient, sanitary flakes or granules.

Ivory Dispensers treat school budgets gently, too. Both their initial and maintenance costs are low. An illustrated folder tells you all about Ivory Dispenser Service. May we send you one?

IVORY SOAP DISPENSERS

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Coming Meetings

Oct. 3-4—Winfield Educational Clinic, Winfield, Kan.

Oct. 9-11—Utah Education Association, Salt Lake City.

Oct. 13-16—National Association of Public School Business Officials, Atlantic City, N. J.

Oct. 16-18—Wyoming Education Association, Cheyenne.

Oct. 22-24—Nebraska State Teachers Association, Lincoln, Omaha, Norfolk, Grand Island, Holdrege, Scottsbluff.

Oct. 22-25—New Mexico Educational Association, Albuquerque.

Oct. 23-24—Minnesota Education Association, Municipal Auditorium, St. Paul.

Oct. 23-24—New Hampshire State Teachers Association, Nashua.

Oct. 23-25—South Dakota Education Association, Hot Springs and Pierre.

Oct. 23-25—Colorado Education Association, Denver, Pueblo, Grand Junction.

Oct. 24-25—Maryland State Teachers Association, Baltimore.

Oct. 29-31—West Virginia State Education Association, Charleston.

Oct. 29-31—North Dakota Education Association, Minot.

Oct. 29-31—Maine Teachers Association, Bangor.

Oct. 29-Nov. 1—National School Cafeteria Association, San Antonio, Texas.

Oct. 30-Nov. 1—South Dakota Education Association, Watertown and Sioux Falls.

Oct. 31—Connecticut State Teachers Association, Hartford, New Haven, Bridgeport.

Nov. 6-7—Arkansas Education Association, Senior High School, Little Rock.

Nov. 6-8—Conference of Food Service Directors, New York City.

Nov. 6-8—Iowa State Teachers Association, Des Moines.

Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.

Nov. 7-9—New Jersey Education Association, Atlantic City.

Nov. 10-13—National Council on Schoolhouse Construction, Cavalier Hotel, Virginia Beach, Va.

Nov. 13-15—Arizona Education Association, Phoenix.

Nov. 16-19—Louisiana Teachers Association, Municipal Auditorium, New Orleans.

Nov. 18-21—Virginia Education Association, Richmond.

Nov. 20-22—Texas State Teachers Association, Houston.

Nov. 24-25—New York State Teachers Association, Hotel Statler, Buffalo.

Nov. 26-29—Missouri State Teachers Association, St. Louis.

Dec. 10-13—American Vocational Association, Hotel Statler, Boston.

Dec. 29-31—Pennsylvania State Education Association, Harrisburg.

Dec. 29-31—Illinois Education Association, Chicago.

Feb. 20-21—National Advisory Council on School Building Problems, St. Francis Hotel, San Francisco.

Feb. 21-26—American Association of School Administrators, San Francisco.

Feb. 26-28—American Association of Junior Colleges, Los Angeles.

April 8-10—Inland Empire Education Association, Spokane, Wash.

April 17-18—Idaho Education Association, Boise High School, Boise.

HEALTH

New Quarantine Regulations

Regulations governing the quarantine of cases of measles and the exclusion of contacts from school or employment were amended at a recent meeting of the New York City board of health. Hereafter, actual cases of measles or German measles are to be isolated until five days after the appearance of the rash, the

board ruled, but contacts with such cases will not be excluded either from school or from employment.

INSTRUCTION

Engineering Training Expanded

The activities of the engineering defense training program have been broadened to include chemistry, physics and business administration, it has been announced by John W. Studebaker, U. S. Commissioner of Education. To conform with its broadened scope, the title of the program has been changed to "Engineering, Science and Management Defense Training."

Institutions that grant degrees for study in chemistry, physics and business administration are now eligible to give short, intensive training courses on the college level to present and prospective workers in industries and government agencies concerned with national defense.

Funds totaling $17,500,000 have been provided by Congress to cover the cost of courses "designed to meet the shortage of engineers, chemists, physicists and production supervisors in fields essential to the national defense."

Counselors for Freshmen

A select group of specially trained upperclassmen will serve as advisers to new students at the University of South Carolina this fall. Each adviser will conduct a series of conferences with his group of 20 or 30 freshmen and will also have a personal interview with each freshman. The group discussions will deal with such subjects as class attendance, the honor principle, extracurricular activities, scholastic orientation, student government, campus ethics and the use of the university's facilities.

Defense Legislation Taught

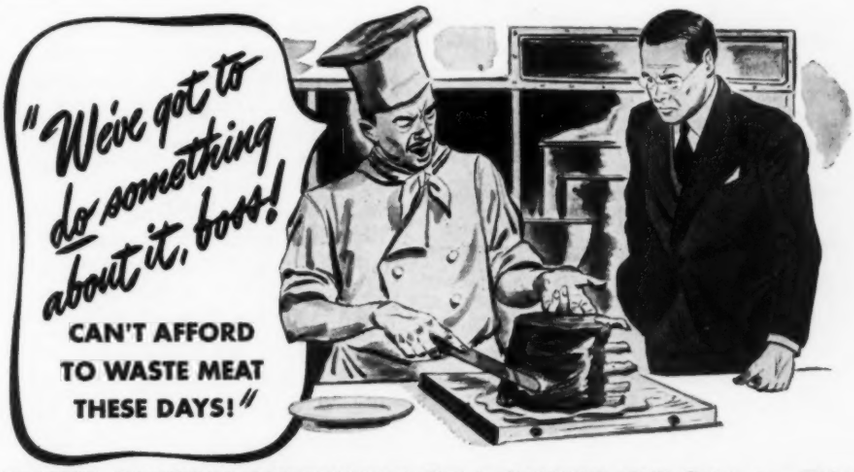
"Defense Legislation and Military Law" is the subject of a new course offered at the University of Kentucky during the first term of the 1941-42 school year. The course will offer three credits and will deal with recent defense legislation affecting industries; property rights; the establishment of a more efficient Army and Navy, and the legal status of soldiers and sailors as provided by the soldiers' and sailors' Civil Relief Act of 1940.

Models for Defense Training

A series of machine motion models especially designed for use in connection with national defense training has been produced by the Museum Extension Project of the W.P.A. at Harrisburg, Pa., in collaboration with the Pennsylvania State College. The materials available include transparent plastic engineering drawing models of the power section of a radial airplane engine and a Piper Cub training plane, among others. These models are available to institutions that are engaged in national defense training and can be obtained from the W.P.A. at Harrisburg at prices that cover the cost of materials and crating for shipment.

Junior Museum Opened

Two important features that have been developed in conjunction with the opening of the junior museum of the New York Metropolitan Museum of Art are a small library of books particularly suited to juvenile needs and tastes and galleries in which changing exhibitions will be held. The program for young people has been greatly enlarged by the establishment of the junior museum, it is reported, and it will provide facilities for from 800 to 1000 children per day during the school year. The junior museum will be situated temporarily in galleries on the first floor adjacent to the Central Park entrance. Checkrooms, waiting rooms and a lunch room are so located as to be accessible to the galleries.



TESTS SHOW SHRINKAGE LOSSES OF 36¢ to 56¢ IN COOKED MEAT ON EVERY RIB OF BEEF

Well-done meat losses, often as high as 45%, were reduced to 14% in a test described* by Miss K. Vaughn, prominent restaurant operator. Other tests showed savings of 18% to 20%—still a loss of 36¢ to 56¢ worth of cooked meat on every rib of beef and important because that loss can be kept as low as 8% on ribs cooked rare. Stop waste, and—

MEET RISING FOOD COSTS WITH MODERN COOKING EQUIPMENT!

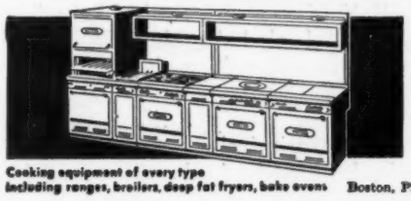
Miss Vaughn says, "Any kitchen operator can do big things in bringing meat shrinkage to a minimum, in avoiding the waste of overcooking, in speeding the cooking process, and in turning out the type of product which will make for maximum customer-satisfaction!"

How? By using a dependable meat thermometer, and by installing modern insulated ranges with thermostatic control. The new Vulcan 50th Anniversary Line of streamline cooking equipment embodies every practical improvement for saving gas and improving service. It represents more than 50 years experience in outfitting commercial kitchens. Before you buy *any* equipment, see Vulcan!

*THERE IS NO PROFIT IN SMOKE—*American Restaurant Magazine,* April 1941

YOU CAN DO IT BETTER FOR LESS WITH THE NEW **VULCAN** COOKING EQUIPMENT

Write for Catalog NS-10



Cooking equipment of every type including ranges, broilers, deep fat fryers, bake ovens

A complete line of units, all perfectly coordinated, all from one fully responsible source

STANDARD GAS EQUIPMENT CORPORATION

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Book Week Suggestions

"Forward With Books" will be the slogan for Children's Book Week, which has been designated as November 2 to 8. A new manual of suggestions for the observance of the week has been prepared by the Publishers' Weekly, 62 West Forty-Fifth Street, New York, and will be sent to teachers who wish to plan programs and exhibits.

Three New Courses at Missouri

Two new courses in home economics, "Large Quantity Cookery," and "Institutional Administration," are being offered to students of the University of Missouri this term. These courses will enable home economics students to comply with the requirements for dietitians. In addition, the university's college of agriculture has instituted a new two year short course in agriculture.

NAMES IN NEWS

Superintendents

HENRY L. SMITH, who has held the dual positions of superintendent of schools, Lenox, Mass., and principal of the Lenox High School, resigned recently to accept a government position in Boston.

W. J. HIMES, principal of Hayesville High School, Hayesville, Ohio, has been named to succeed EARL METZ as superintendent of the Hayesville-Vermilion school system.

JAMES E. SUTTON, who has been principal of Marshal High School, Marshall, Mo., for the last fourteen years, has accepted the position of superintendent of schools at Fayette, Mo.

W. FRANCIS ENGLISH has assumed the duties of superintendent of schools at Fulton, Mo., succeeding THOMAS CONRAD.

CLYDE E. BOUNDS, supervising principal of South Forks High School, South Forks, Pa., has been elected superintendent of schools at Windber, Pa.

CHARLES D. LUTZ, for seventeen years principal of Horace Mann High School, Gary, Ind., has been elected superintendent of schools at Gary.

R. E. HOOD, superintendent of schools at Elberton, Ga., was named superintendent of schools of Glynn County, Georgia, to succeed LT. COL. GEORGE W. WANNAMAKER, who has been called into active military service.

J. W. LITHERLAND is the new superintendent at Wayne, Neb., having resigned in early August from the superintendency at Culbertson, Neb.

HAROLD H. HELMS, former superintendent at New London, Wis., is the new head of the school system at Marshfield, Wis.

CARROLL D. KEARNS has succeeded W. W. IRVINE, retired, as superintendent of schools, Farrell, Pa. Mr. Kearns was head of the music department of Slippery Rock State Teachers College.

CHARLES DETRICK of Good Hope, Ill., has become superintendent of Port Byron High School, Port Byron, Ill., succeeding Supt. EDWIN E. JOHNSON, who has gone to Seaton, Ill., as head of schools.

REV. HARRY L. COWDEN of Cambridge, Ky., has assumed his duties as superintendent of the school at Frenchburg, Ky., succeeding H. GLENN STEPHENS, who will return to church duties.

E. C. DODD, superintendent of schools at Brownsville, Tex., resigned recently after more than seventeen years of service to the Brownsville school system. In addition to his duties as superintendent he also served as president of the Brownsville Junior College.

DONALD DUSHANE, superintendent of schools at Columbus, Ind., since 1918, and retiring president of the National Education Association, has resigned to accept the position of secretary of the N.E.A.'s National Commission to Defend Democracy Through Education.

Principals

A. C. SIPES, principal of Robinson High School, Robinson, Kan., for the last three years, has accepted the principalship of the schools of Monett, Mo. He will also serve as assistant dean of the junior college at Monett.

STUART R. RACE has accepted the position of supervising principal of schools at Newton, N. J. Mr. Race has been supervising principal at Glen Rock, N. J., for the last twelve years.

REV. ELDON EVANS has been named principal of New Paris High School, New Paris, Ind., to succeed EZRA M. HOOVER, who has become county superintendent of schools, Elkhart County, Indiana.

LOUIS BLUMBERG is the new principal of Woodridge High School, Woodridge, N. Y. He succeeds WILLIAM T. MCKERNAN who was recently made district school superintendent.

GERALD HOLLMAN, principal at Wilson School, Wilson, Okla., has been named principal of Norman Senior High School, Norman, Okla., to replace MILTON BRADLEY.

FLOYD A. ROWE, directing supervisor of physical welfare in the public schools of Cleveland since 1923, has been chosen principal of Collinwood High School, Cleveland.

E. E. HANSON, principal of Lake Bluff Public School, Lake Bluff, Ill., has resigned to accept the position of dean of men of the Northern Illinois State Teachers College, DeKalb, Ill. GEORGE C. WRIGHT, principal of the junior high school, Blue Island, Ill., will succeed Mr. Hanson.

ALVIN A. GAFFNEY, formerly a teacher at Henry Lord Junior High School, Fall River, Mass., has been chosen principal of Susan H. Wixon School, Fall River.

GENEVIEVE L. COLLIER, principal of Horton School, Port Chester, N. Y., has been granted leave of absence until January when she will be retired.

DAVID E. BRUBAKER, for three years principal of Cienega Elementary School, Los Angeles, will take over the principalship of Richland Avenue School, West Los Angeles.

JOHN E. DUGAN, assistant principal of Princeton High School, Princeton, N. J., since 1935, has been appointed principal of Haddon Heights School, Haddon Heights, N. J.

J. D. MCKIBBEN of Paulsboro, N. J., has been appointed to succeed PAUL T. WOHLSEN as principal of South Side High School, Rockville Centre, N. Y.

EDWARD E. ALLEN has been named supervising principal of Akron High School, Akron, N. Y., to succeed G. A. LEOPOLD.

V. H. MOORE, principal of Edison Grade School, Eugene, Ore., has accepted a position as principal of Corvallis High School, Corvallis, Ore.

PAUL C. ROUZER, former superintendent of schools, Mineral County, West Virginia, has been named principal of Fort Ashby High School, Fort Ashby, W. Va.

SAMUEL T. FULLER, for the last two years headmaster of Jefferson High School, Manchester, N. H., was recently inducted into the Army.

HARRY A. BLAKE, principal of N. H. Fay High School, Dexter, Me., has retired after twenty-two years of service.

WILBERT WELCH, assistant principal, has been elevated to the principalship of Union High School, Burgettstown, Pa.

EDGAR L. HARDEN of Independence, Iowa, has been appointed principal of the Charleston High School, Charleston, Ill.

DASIL A. SMITH, assistant county superintendent of schools, Weber County, Utah, has been named principal of the Weber County High School.

In the Colleges

ROBERT L. JOHNSON was elected president of Temple University on September 17. Former relief administrator for Pennsylvania, he has more recently been a publisher and management consultant in New York City. He was one of the four founders of *Time, Life* and *Fortune*. DR. CHARLES E. BEURY became president emeritus of Temple on August 31.

DR. LEWIS WEBSTER JONES, economist and member of the faculty since its beginning, is the new head of Bennington College, succeeding ROBERT D. LEIGH, first and only president of the women's college.

The New Chelsea Salt and Pepper Shaker Tops

Made of a new crystal plastic. Look just like glass. Three sizes — standard thread. Fit most shaker bottles. Not affected by hot water — even up to 190°. No plating to wear away. Used by finest food service organizations.

Ask your equipment dealer for samples—test them.

CHELSEA PRODUCTS, 281—11TH AVE., NEW YORK
Makers of the famous CAFATRAYS.

MEDART OFFERS THE OFFICIAL FAN-SHAPED BACKBOARD . . .

ONE PIECE STEEL CONSTRUCTION

Now Official!

Of course, you want the new, fan-shaped backboard—the one and only backboard recognized as "Official" by the National Basketball Committee of the United States and Canada. The Medart Backboard is fabricated of one piece of steel, strongly braced and priced within the reach of all. Be ready for the new season. Replace you old equipment without delay.

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3532 DeKalb Street St. Louis, Mo.

QUALITY Plus ECONOMY Victoria TOILET TISSUES

NOW AVAILABLE IN BLEACHED OR UNBLEACHED

Fine tissues that meet the requirements of industrial plants, offices and institutions as to price and quality. Made by craftsmen with 60 years paper-making experience. Leading Paper Merchants sell VICTORIA tissues.

The Victoria Paper Mills Company
FOUNDED 1880. FULTON, N. Y.

The Pencil Sharpener that knows when to

Why should stopping be so important in a Pencil Sharpener?

Because, a Pencil Sharpener that cuts a keen point —quickly and neatly—and then stops! wastes no time or material. And elimination of waste is one of today's major problems.

Boston Pencil Sharpener KS takes eight varied sizes, sharpens them speedily, efficiently and stops! when the proper point is made. Schools which install Bostons are doing their part toward eliminating waste in time and material.

C. HOWARD HUNT PEN CO., Camden, N. J.

BOSTON
PENCIL SHARPENERS

Dr. Carl Raymond Woodward, secretary of Rutgers University, was unanimously elected president of Rhode Island State College. His appointment will take effect November 1.

Dr. Paul C. Packer, dean of education of the University of Iowa, has been elected temporary president of the University of Vermont and the State Agricultural College.

Dr. Lester K. Ade, former superintendent of public instruction, resigned recently as president of Mansfield State Teachers College, Emporium, Pa. He will become senior specialist in school facilities in the deep South with headquarters at Dallas, Tex.

Private Schools

Dr. Charles S. Tippetts is the new head of Mercersburg Academy, Mercersburg, Pa., succeeding Dr. Boyd Edwards. Doctor Tippetts was formerly dean of the school of business administration, University of Pittsburgh.

Miscellaneous

Kenneth C. Ray, superintendent of schools at Zanesville, Ohio, has been named state director of education, succeeding E. N. Dietrich of Bucyrus. Mr. Ray was at one time a member of the state legislature and, at 39, is one of the youngest appointees to the state post. Donald F. Summers will succeed him as head of the Zanesville school system.

Dr. Sidney B. Hall, for more than ten years state superintendent of public instruction for Virginia, resigned in mid-August and on September 1 became professor of educational administration at George Washington University. Dabney S. Lancaster, a former secretary of the state board of education and at present executive secretary of Sweet Briar College, was selected as the new superintendent. He took office September 1 to fill out the last four months of Doctor Hall's term.

Frederick James Moffitt has been appointed associate supervisor in elementary education in the New York State Education Department. Mr. Moffitt has been director of public relations of the New York State Teachers Association. He is a member of the editorial board of The Nation's Schools.

Dr. Leon S. Waskin has been appointed head of the division of public instruction of the Michigan Department of Public Instruction. He was formerly director of the Adult Education Laboratory.

O. E. Hill, superintendent of schools of Galion, Ohio, since 1936, has been appointed assistant state director of education in Ohio.

Deaths

John Robert Neely, principal of the high school at Nichols, N. Y., died recently following a six weeks' illness. He had been at Nichols for nine years.

Thomas H. Murray, who served as principal of the Bangs Avenue South School, Asbury Park, N. J., for thirty-eight years, died recently at the age of 83.

Edward S. Williams, supervising principal of public schools in Hanover Township, Pennsylvania, died recently.

Rev. Irving H. Berg, dean of the college of arts and pure science, New York University, died recently at the age of 64.

Dr. Jesse H. Newlon, director of the division of the foundations of education at Teachers College, Columbia University, died of a heart ailment on September 1. Doctor Newlon, a former president of the National Education Association, had been a member of the Teachers College faculty since 1927. He was chairman of the college's division of instruction from 1934 to 1938.

Dr. Ellwood Patterson Cubberley, dean emeritus of Stanford University school of education and donor of the $535,000 school of education building, died September 14 at the age of 73. Doctor Cubberley had been associated with the university from 1898 until his retirement in 1933. He became dean of the school of education in 1917.

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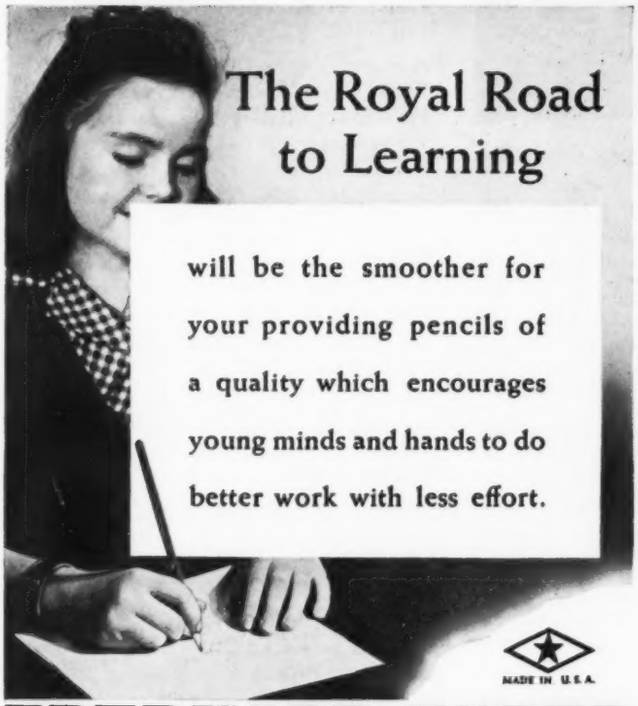

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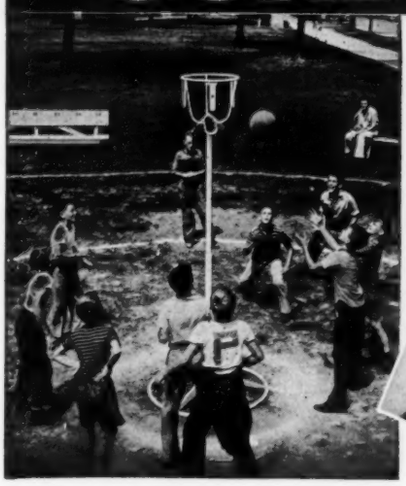

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ADVERTISING PAGES REMOVED

The Bookshelf

General

THE TEACHER IN THE MODERN ELEMENTARY SCHOOL. *By Robert Hill Lane. Boston: Houghton Mifflin Company,* 1941. *Pp.* viii+397. $2.40.

TEACHER AND COMMUNITY. *By Dorman G. Stout. Yonkers-on-Hudson, N. Y.: World Book Company,* 1941. *Pp.* xii+236. $2.

IN MY MOTHER'S HOUSE. *By Ann Nolan Clark. New York: The Viking Press,* 1941. *Pp.* 56. $2.

THE NINTH YEARBOOK OF SCHOOL LAW, 1941. *Edited by M. M. Chambers. Washington, D. C.: American Council on Education,* 1941. *Pp.* viii+200. $1.

EDUCATIONAL SOCIOLOGY. *By Frederick E. Bolton and John E. Corbally. New York: American Book Company,* 1941. *Pp.* xvi+632. $3.

PROMOTION OR FAILURE FOR THE ELEMENTARY SCHOOL PUPIL? *By Carleton M. Saunders. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. $1.25.

THE TELEPHONE IN A CHANGING WORLD. *By M. M. Dilts. New York: Longmans, Green & Company,* 1941. *Pp.* xiv+219. $2.50.

CHILD NUTRITION IN A RURAL COMMUNITY. *By H. C. D. Somerset. New Zealand: New Zealand Council for Educational Research,* 1941. *Pp.* 38.

EDUCATION IN A WORLD OF FEAR. *By Mark A. May. Cambridge, Mass.: Harvard University Press,* 1941. *Pp.* 74. $1.

CENTRALIZED VS. DECENTRALIZED GOVERNMENT IN RELATION TO DEMOCRACY. *By Paul Studenski and Paul R. Mort. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. *Pp.* vii+69.

NAZI EUROPE AND WORLD TRADE. *By Cleona Lewis. Washington, D. C.: The Brookings Institution,* 1941. *Pp.* xi+200. $2.

PUPILS ARE PEOPLE. *A Report of the Committee on Individual Differences of the National Council of Teachers of English. By Nellie Appy and Others. New York: D. Appleton-Century Company,* 1941. *Pp.* xiii+303. $2.25.

ART IN SECONDARY EDUCATION. *By Leon L. Winslow. New York: McGraw-Hill Book Company, Inc.,* 1941. *Pp.* xvii+396. $3.

WHAT THE NEW CENSUS MEANS. *By Stuart Chase. Pp* 30. MAN MEETS JOB—HOW UNCLE SAM HELPS. *By Philip S. Broughton. Pp.* 32. 30 *Rockefeller Plaza, New York: Public Affairs Committee, Inc.,* 1941. $0.10 *(Paper Covers).*

Textual

HEALTH IN A POWER AGE. *By W. W. Charters, Dean F. Smiley and Ruth M. Strang. New York: The Macmillan Company,* 1941. *Pp.* ix+333. $1.08.

AIDS FOR SPANISH TEACHER. *Compiled by Lili Heimers. New York: G. E. Stechert & Co.,* 1941. *Pp.* 76. $0.50 *(Paper Cover).*

STUDENT AND EMPLOYEE SAFETY IN COLLEGES AND UNIVERSITIES. *By J. C. Stennett. Chicago: National Safety Council, Inc.,* 1941. *Pp.* 82. $1 *(Paper Cover).*

SAFETY IN PHYSICAL EDUCATION AND RECREATION. *Prepared by National Safety Council, Inc.,* 1941. *(Chicago.) Pp.* 95. $0.50 *(Paper Cover).*

THE SOPHOMORE AND FRESHMAN TESTING PROGRAM IN THE ACCREDITED HIGH SCHOOLS OF MICHIGAN, 1939. *By Clifford Woody. Ann Arbor, Mich.: School of Education,* 1941. *Pp.* 160. $0.75 *(Paper Cover).*

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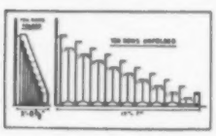

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Lighting Survey Shows Current School Building Practice

Dear Mr. Superintendent:

As you know there is some conflict of opinion on school lighting, a clarification of which should prove valuable to all school administrators. In an effort to find out just what current school lighting practice is, we should greatly appreciate it if you would take several minutes to fill out the questionnaire on the reverse side of this letter.

The Nation's Schools Publishing Company, Inc.

The foregoing letter with accompanying questionnaire was mailed to 533 superintendents of schools in July.

In order to get the proper geographic distribution, the number sent to each state was proportionate to the total number mailed as The NATION'S SCHOOLS' circulation in each state is to its total circulation. For example, 4.5 per cent of The NATION'S SCHOOLS' total circulation is in Ohio, so 12 were sent to Ohio.

Considering the fact that there were 19 individual questions to be answered, the 30 per cent return was exceedingly good. Actually, 167 returns were received.

The returns give wide geographic representation as well as excellent balance among large, medium sized and small school systems. We, therefore, feel that the results tabulated below give a good over-all picture of the present conditions and thinking in regard to school lighting.

1. Are eye examinations a part of your pupil health program?

Yes	139
No	24
No answer	4

2. Approximately, what percentage of pupils in your schools wear glasses?

Less than 5%	18
5 to 10%	49
10 to 15%	28
15 to 20%	10
20 to 25%	9
Over 25%	5
Don't know	13
No answer	35

3. What is the predominate method of hanging window shades in your classrooms?

From top	62
From top and center	30
From center only	80
From top and bottom	5
From bottom	1
Venetian blinds	4
No answer	1

4. What is the predominate type of lighting fixture in your classrooms?

Direct	23
Enclosed globe	117
Indirect or semi-indirect	45
No answer	2

5. How many square feet of floor area are there for each ceiling outlet?

Less than 100	9
From 100 to 150	38
From 150 to 200	29
From 200 to 250	12
From 250 to 300	6
More than 300	10
Varies in different buildings	15
Don't know	5
No answer	43

6. Do you use light meters to check foot-candle intensity of classroom lighting?

Occasionally	98
Regularly	14
No	55

7. What is the minimum foot-candle intensity you try to maintain for classrooms?

No definite standard	52
Five f.c.	3
From 5 to 10 f.c.	1
Ten f.c.	44
From 10 to 15 f.c.	2
Fifteen f.c.	19
From 15 to 20 f.c.	2
Twenty f.c.	13
More than 20 f.c.	4
Don't know	2
No answer	25

8. How many times greater is the light at the classroom windows than at the inner wall?

Same	4
From 2 to 5 times	3
From 2 to 10 times	1
Two times	35
From 3 to 5 times	1
Five times	41
From 5 to 10 times	2
Ten times	13
Fifty times	0
Varies	1
Don't know	18
No answer	48

9. Do you have a relighting program?

Contemplated	47
In work	31
Completed	14
No	69
In work and contemplated	1
Old contemplated; new completed	1
No answer	4

10. What rewiring would a relighting program entail?

Relocation of outlets	62
Larger wire capacity	74
Larger conduits	33
None	33
Varies	2
Don't know	1
No answer	20

11. What is the predominate size of lamps used in classroom lighting fixtures?

100 watts	40
150 watts	4
200 watts	68
250 watts	1
300 watts	19
500 watts	0
100 & 200 watts	9
100 & 300 watts	1
100 & 150 watts	1
100 & 500 watts	1
100, 300 & 500 watts	1
200 & 300 watts	11
200, 300 & 500 watts	1
300 & 500 watts	7
No answer	3

12. How are lamps purchased?

On contract	56
Local dealer	92
Both	14
Free exchange	1
No answer	4

13. Who is responsible for selecting brand of lamp?

Superintendent	89
Superintendent, custodian	11
Superintendent, board member	10
Superintendent, principal, cus-	

Who Selects Lamps? Cont.

todian, board member	1
Superintendent, board member, building contractor, plant engineer	1
Superintendent, principal	1
Superintendent, principal, custodian	1
Custodian	23
Principal	9
Board member	7
Business manager	4
Superintendent of buildings	2
Deputy superintendent	1
Building engineer	1
Purchasing agent	1
City purchasing agent	1
Municipal light board	1
No answer	3

14. What brand of lamp do you usually buy?

Mazda	62
General Electric	37
Westinghouse	8
General Electric, Westinghouse	7
Edison	3
Hygrade	3
Mazda, Hygrade	2
General Electric, Edison Mazda	1
General Electric, Atlas	1
Hygrade, Champion	1
Alternate by years	1
No preference	3
No answer	30

15. What percentage of the total budget is spent for lighting current?

Less than 0.25%	3
From 0.25 to 0.5%	36
From 0.5 to 1%	28
From 1 to 2%	32
From 2 to 3%	9
From 3 to 5%	5
Five per cent	1
More than 5%	2
Don't know	7
No answer	44

16. What is the predominant color used in classrooms?

WALLS

Cream or ivory	73
Buff	66
Green	36
White	17
Gray	6
All colors	4
Blue	3
Brown	1
Pastels	1
Tints that reflect light 70%	1
No answer	1

CEILING

White	80
Cream or ivory	68
Buff	20
Gray	4
All colors	1

Classroom Color Scheme, Cont.

DADO

Buff	29
Brown	22
Green	12
Cream	10
White	8
Oak	7
Gray	6
All colors	2
No dado	1
No answer	75

17. Do you believe fluorescent lighting is—?

Cooler	40
Cheaper	74
Brighter	31
More colorful	8
Easier on the eyes	74
Easier to install	9
Don't know	23
Expensive to install	1

Opinion on Fluorescent Lighting, Cont.

No good	1
Wish we knew	1
No answer	29

18. Have you made any investigation into the advantages and disadvantages of fluorescent lighting?

Yes	83
No	77
Some	2
Office only	2
No answer	3

19. Have you made any installation of fluorescent lighting fixtures in any school building?

Yes	42
No	119
Some	1
Will try during summer	2
Office only	1
No answer	2

Defense Funds for School Construction

Allotment of federal funds for school construction in defense communities is proceeding at a rapid rate. John M. Carmody, federal works administrator, has made three allotments of Defense Public Works Funds, with schools and school additions forming a large group of projects approved.

The total estimated cost of the first 15 school projects approved was $2,663,849. Not all of this sum is federal money for in some localities the sponsors have been able to furnish part of the expansion fund.

The earliest school projects to be approved and the reason for quick action may be seen from the table shown at the bottom of the page.

A total of 1787 applications for funds had been received by the Federal Works Agency on September 2. Of these, 600 were from school boards requesting $117,369,362 in federal funds. School sponsors offered $21,576,762, bringing the total value of proposed schools up to $138,946,124.

Applications for schools are certified by the U. S. Office of Education on the basis of reports from field representatives who have studied the actual school needs in defense areas.

Although construction may be delayed, the Federal Works Agency may release funds to local school boards to equip utility classrooms, pay salaries of additional teachers and to rent or buy busses to transport pupils to adjoining towns in which the schools have room for them.

On September 8 an additional 18 school projects had been approved. Funds allocated for these projects totaled $7,862,684.

Federal Allotments for Schools or School Additions in Defense Communities

State	*City or Township*	*Defense Project in Vicinity*	*D. P. W. Grant*	*Sponsor's Funds*
Mich.	Gratiot tp. (Wayne Co.)	Motor and tank plants	$ 58,900	$ 25,000
Mich.	Battle Creek	Fort Custer; industrial plants	109,650	88,600
Mich.	Livonia & Nankin tps. (Wayne Co.)	Motor and tank plants	12,860	14,650
Miss.	Hattiesburg	Camp Shelby	215,000	185,000
Calif.	Bradley	Camp Roberts	14,500	.....
Calif.	Monterey	Fort Ord, Presidio	97,100*	.....
Maine	Bath (H. S.)	Shipbuilding	134,000	.....
Maine	Bath (Ele.)	Shipbuilding	161,000	.....
Maine	Kittery	Navy Yard	347,960	.....
Mass.	Ayer	Fort Devens	36,000	.....
Wash.	Silverdale	Navy Yard, Torpedo Station, Ammunition Depot	87,500	37,500
Wash.	Poulsbo	Navy Yard, Torpedo Station, Ammunition Depot	31,360	47,040
Tex.	Corpus Christi	Naval Air Training Station	125,000	.....
Tex.	Orange	Shipbuilding	374,490	125,000
Ill.	Rantoul	Air Corps Technical School	123,793	.....

*Additional D. P. W. funds will be forthcoming to help finance $234,045 project

News for Dictators

American dictators have a lot to learn about methods of dictating, according to the manufacturer of SoundScriber, a new type of dictating recorder. The machine utilizes modern radio principles and is said to record sounds emanating from 6 inches to 20 feet or more from the microphone.

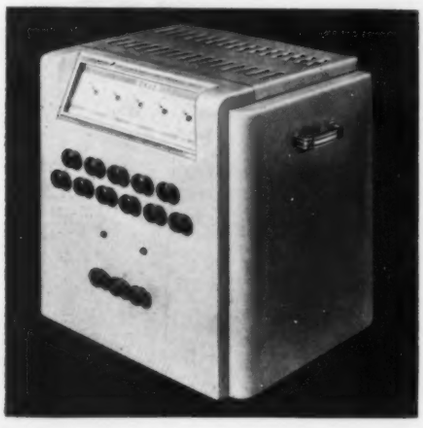
The device consists of a microphone, a recorder and transcriber. Recording disks are 7 inches in diameter and play 15 minutes on each side. The recorder contains a turntable upon which the disk is placed to receive impressions through a recording head with a diamond-tipped stylus. The transcriber has a playback head with sapphire-tipped stylus. Dictation is played back through a built-in loud-speaker or through an extension soft-speaker that is audible only at the secretary's ear. Jacks for earphones are also provided.—SOUNDSCRIBER CORP., 82 AUDUBON ST., NEW HAVEN, CONN.

• *When inquiring, refer to* **NS323**

Multi-Purpose Amplifier

A distinctive feature of Model 700, the new 100 watt amplifier recently announced by Bell Sound Systems, is the readability of its angle-set dials.

The unit is powered by twin amplifiers of 50 watt output, either of which



will operate the system alone, if desired. Each amplifier has an individual, transformer-coupled driver and features maximum distortion of 2 per cent at 50 watt output and not more than 5 per cent distortion at 50 watt output. The amplifiers have separate master gain controls and separate power switches. A third power switch is provided to convert the B supply of the preamplifier section to either one of the power units when the system is operated with a single amplifier.

The unit is compactly designed and is said to afford wide range tone fidelity and excellent sound reproduction.—BELL SOUND SYSTEMS, INC., COLUMBUS, OHIO.

• *When inquiring, refer to* **NS324**

Educational institutions are included among the 20 essential industries to receive the "emergency repair" preference rating of A-10 established September 9. The new plan provides a means of obtaining parts needed to repair actual or imminent breakdown of equipment. In order to obtain the benefit of the rating, purchasers should endorse all orders or contracts for this type of material (both the original and all copies) as follows: "Purchase order for repair or emergency inventory — Preference Rating A-10 under Preference Rating Order P-22.

New Accounting Machine

Many and diversified are the talents of the new Burroughs typewriter accounting machine that is said to be capable of handling several jobs at once. For instance, the machine can be used for keeping such records as accounts receivable, accounts payable, pay roll, general ledger and journal. In each instance the related records are written in one operation, with one handling of figures and forms. Addition and subtraction are automatic in the proper columns. A single key depression prints the entire balance or total; proof totals are automatically accumulated.—BURROUGHS ADDING MACHINE COMPANY, DETROIT, MICH.

• *When inquiring, refer to* **NS325**

Plaster in Colors

A master stroke in painting and decorating is the development of Colorkote, the double-purpose plaster, says the manufacturer. The material combines the processes of plastering and decorating and thereby cuts costs. It can be cleaned with wallpaper cleaner or a damp cloth; if necessary, it can be washed with soap and water. Colorkote is mixed so as to eliminate all danger of color streaks resulting from color pellets. If and when it is desired, paint, texture plaster or wallpaper can be applied over the Colorkote.—CLEVELAND GYPSUM CO., MARION BLDG., CLEVELAND.

• *When inquiring, refer to* **NS326**

Sanitary Toilet Seat

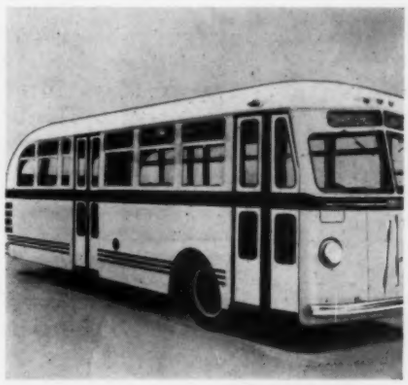
A toilet seat that is designed to obviate all danger of uncleanliness has recently been marketed by the Sperzel Sanitary Seat Co. The seat is not a complete oval but consists of two bakelite seat pads attached to a plastic covered steel rod. A patented spring hinge pulls the seat erect and away from the bowl when it is not in use. The sanitary seat can be easily attached to any standard bowl by means of a spring tension bolt which eliminates any slipping or weaving.—SPERZEL SANITARY SEAT CO., 1033-35 METROPOLITAN LIFE BLDG., MINNEAPOLIS, MINN.

• *When inquiring, refer to* **NS327**

Rear-Engined Transit Coach

Safety, speed and streamlining are among the advantages offered by Reo Motors, Inc., in the new line of rear-engined coaches, which are well adapted to the needs of pupil transport. Safety is provided by large, powerful internal hydraulic brakes with booster and reserve tank and by the all-steel insulated body, the manufacturer states.

The coaches are powered for quick pick-up in city traffic and for sustained

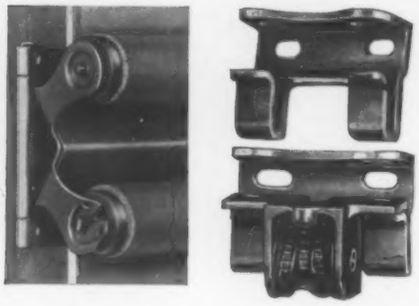


high speed operation on the open road. The engines are mounted as a unit with clutch and transmission and are specifically designed for rear-end installation. A patented ventilating unit provides a complete change of air at intervals of four minutes or less. The coach is streamlined and features attractive appointments, generous aisle space, "leg room" and comfortable seating accommodations.—REO MOTORS, INC., LANSING, MICH.

• *When inquiring, refer to* **NS328**

Demountable Shades

Window shades that come down without a struggle—without even the necessity for removing a single screw—are



offered by Luther O. Draper Shade Company. The new Draper pulley, which is equipped with an extra large molded plastic wheel, is said to be extremely easy on the cord and is silent in operation. It rests firmly in its especially constructed bracket and can be removed simply by being lifted from the bracket. The pin and hinge arrangement is also obtainable on the "style V" light shield. This makes it possible to remove the entire shade instantly for window washing or for cleaning of the shade.—LUTHER O. DRAPER SHADE CO., SPICELAND, IND.

• *When inquiring, refer to* **NS329**

Two Compartment Ovens

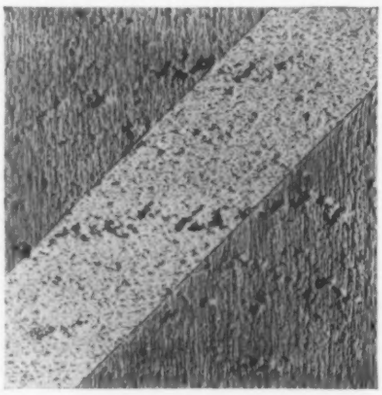
The rising cost of meat prices receives a setback with the advent of the new Vulcan two compartment, two deck roasting and baking oven, which reduces meat shrinkage by as much as 20 per cent, the manufacturer asserts. This desirable effect is achieved by means of new burners and an oven heat control

that make possible low temperature roasting. Other improvements in these ovens include a solid shelf and a special heat circulation system for each half of the oven, which provide two evenly heated compartments. When it is desired to use the oven for high roasts, the solid shelf can be removed. Ease of cleaning the interior of the unit is assured by the porcelain enamel lining.—STANDARD GAS EQUIPMENT CORPORATION, 18 E. 41ST ST., NEW YORK, N. Y.

• *When inquiring, refer to* **NS330**

Decorative Ceiling Treatment

A new note in interior decoration that also has a softening effect on school noise is Motif'd Acoustone, a recent development in acoustical treatment manufactured by U. S. Gypsum Company. The decorative effect is produced, says the manufacturer, by etching attractive patterns upon the sound-absorbing surfaces of Acoustone, rather than by the use of garish colors. No painting is required unless a colorful ceiling is desired. In such cases the material can

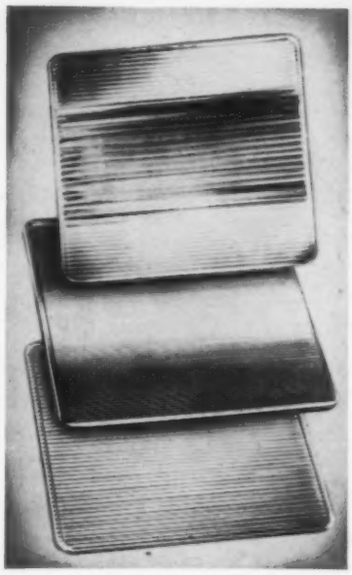


be painted without reducing its high acoustical properties, it is stated. The spline alignment of Acoustone produces a self-leveling surface on which all corners and edges of each unit are in exact position.—UNITED STATES GYPSUM COMPANY, CHICAGO, ILL.

• *When inquiring, refer to* **NS331**

Fluorescent Light Control

Fluorescent lighting can now be controlled in accordance with individual needs, asserts the Holophane Company. When this company's new "Controlenses" are used with fluorescent fixtures that meet the optical design specifications established by the Holophane engineering department, they will produce three basic lighting distribution patterns. The first, known as "Intensive Controlens," produces the normal "uniform spacing" lighting of horizontal surfaces in rooms of normal height. The second, "Concentrating Controlens," produces a rigidly confined focusing type of light distribution. The third, the "Extensive Controlens," is said to be particularly



adaptable for areas where the lighting of vertical surfaces is desired or in low ceiling areas to permit economical wide spacing of the lighting units.—HOLOPHANE COMPANY, 343 MADISON AVE., NEW YORK, N. Y.

• *When inquiring, refer to* **NS332**

Baker's Table

A new development in the design of bakers' tables assures absolute sanitation and ease of cleaning, advises S. Blickman, Inc. Replacing the customary enclosed cabinet, the entire understructure of the table is completely open with sections for movable bins on wheels. This change eliminates areas in which vermin can flourish. The bins can be moved around without difficulty and are readily accessible for cleaning. Furthermore, their mobility provides for easy transfer

of materials from the central supply point to the table. The bins are constructed of stainless steel and have rounded corners. Shelves and spice bins are on cantilever supports that remove all obstructions from the table top. The table and bins are constructed of stainless steel.—S. BLICKMAN, INC., WEEHAWKEN, N. J.

• *When inquiring, refer to* **NS333**

Sanding Unit for Small Areas

The Rotoedger, recently introduced twin-motored sanding machine, does its best work in areas that cannot be handled easily by larger floor sander units. These include stair treads, landings, alcoves and small closets. The twin motor construction, the manufacturer says, permits faster, dustless sanding. One motor

drives the sanding disk while the second drives the dust pick-up fan at full speed, regardless of the sanding load. The fan motor is controlled by a separate switch so that it can be shut off when the custodian is sanding in wet varnish, thus preventing the gumming up of the fan and the need for frequent cleaning.
—Skilsaw, Inc., 5033 N. Elston Ave., Chicago, Ill.

• *When inquiring, refer to* **NS334**

Portable Recorder

A recording machine that should be popular both for its price and for its portability has recently been announced by the Webster-Chicago sound division of Webster-Rauland.

Equipped with a low-pressure tone arm to minimize wear on records and to improve the fidelity of the tone, the unit is said to be extremely simple to operate. Proper recording volume is ensured by a recording level indicator. The machine has a 10 inch turntable that will handle 12 inch blanks if they are properly constructed. The friction drive mechanism on the recording head permits universal starting and stopping at any point on the record blank.—Webster-Rauland, 3825 W. Armitage Ave., Chicago, Ill.

• *When inquiring, refer to* **NS335**

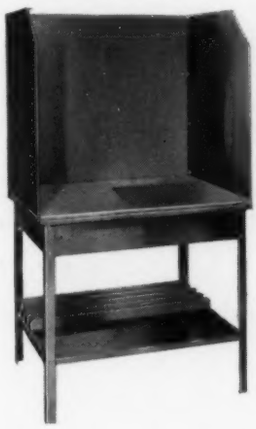
Germicide Deodorized

Among the improvements recently made by Midland Chemical Laboratories in its germicidal agent, Neo Germolyptus, is a slight, pleasant perfume odor that replaces the old medicinal smell. Three other changes in the product are: (1) elimination of the irritating characteristics that were formerly noticed by those who possessed an allergy to the product; (2) lightening of the color, and (3) a new phenol coefficient which is now guaranteed to be not less than 8 when tested against B.typhosus and not less than 3.5 against Staphylococcus aureus. The cleaning action of Neo Germolyptus is mild yet fast and efficient.—Midland Chemical Laboratories, Inc., Dubuque, Ia.

• *When inquiring, refer to* **NS336**

Work Benches for Workshops

Two new welding benches have been developed by Lyon Metal Products for use in vocational and machine shops. One bench, designed for gas welding, is built with a frame supporting a fire brick top, 34 inches from the floor. The bench is provided with a shelf and four



separators for welding rods, as well as with additional space for storage. Another bench, which is now in production, is to be used for arc welding and has a 35 inch shield on the back and sides of a smooth 10 gauge steel working top that is 33 inches from the floor. This bench, also, is provided with the shelf and rod separators.—Lyon Metal Products, Inc., Aurora, Ill.

• *When inquiring, refer to* **NS337**

Low Cost Acoustical Material

High sound-absorbing efficiency is combined with low cost in the new "Cushiontone" acoustical material, says the Armstrong Cork Company. The material is made of a special-density fibrous composition, which, being light in weight, requires no extra wall or ceiling reenforcement before installation. A total of 484 deep perforations per square foot is said to give Cushiontone its high sound-absorption values at all standard frequencies; the noise reduction coefficient reaches as high as 75 per cent. The surface can be cleaned with a vacuum cleaner or wallpaper cleaner. It can be painted without loss of acoustical efficiency.—Armstrong Cork Company, Lancaster, Pa.

• *When inquiring, refer to* **NS338**

Metal Furniture Stripper

Refinishing of metal furniture is facilitated with the use of Oakite M3, a material especially designed for stripping paint from chairs, tables, desks and other metal furniture. The material is used in tanks and the furniture is immersed in a hot solution for from ten to forty minutes, depending upon the amount of paint or the number of coats that must be removed. After being thoroughly softened and loosened, the paint is then completely removed by a pressure rinse.—Oakite Products, Inc., 18A Thames St., New York, N. Y.

• *When inquiring, refer to* **NS339**

"Hushed" Vacuum Cleaner

Wherever silent operation of vacuum cleaners is desirable, Hild Floor Machine Company recommends its new Model 25, the "Hushed" Hild unit which is said to operate with a whisper rather than a roar.

This unit is designed for dry or semi-wet pick-up work, such as removal of

moisture after shampooing upholstery or tacked down carpeting. The vacuum moves 100 cubic feet of air per minute. Air speed through the hose is 2½ miles per minute. The cleaner is supplied with a 15 foot hose of 1½ inch inside diameter, which is said to be extremely flexible.

The machine connects to any lamp socket or base plug and operates on the lighting circuit.—Hild Floor Machine Co., 1313 W. Randolph St., Chicago.

• *When inquiring, refer to* **NS340**

NEW LITERATURE

Treatment of Low-Pressure Boilers

Of particular interest to superintendents and building engineers, says the manufacturer, is the informative bulletin on water treatment for low-pressure boilers published by AMERICAN K.A.T. CORPORATION, 221 E. 42ND ST., NEW YORK, N. Y. The bulletin is presented in question-and-answer form and explains the conditions that require water treatment, the differences in various kinds of cleansing agents and methods that have proved successful in maintaining trouble-free operation.

• *When inquiring, refer to* **NS341**

Power Assembly Tools

Twenty-three models of power drivers are described and illustrated in the new data book of BLACK & DECKER MFG. CO., TOWSON, MD. The uses to which each model is particularly adapted, together with the correct accessories, are listed. Three charts indicate the relative performance ranges of the six general groups of power drivers.

• *When inquiring, refer to* **NS342**

"Lighting for Education"

This brochure, issued by the HOLOPHANE COMPANY, INC., 342 MADISON AVENUE, NEW YORK, N. Y., dissects some popular theories regarding lighting and refutes certain fallacies that exist. Some of the topics discussed include: "immaturity" of children's eyes; artificial lighting; glare; eye discomfort; visibility; indirect lighting, and direct lighting.

• *When inquiring, refer to* **NS343**

Nu-Wood Color Harmonizer

In an effort to help the consumer solve the problem of harmonizing designs and colors as cheaply as possible, the WOOD CONVERSION COMPANY, ST. PAUL, MINN., has issued the Nu-Wood color harmonizer. A special six page center section with actual Nu-Wood interiors illustrated in full color is included. By interchanging the wall and ceiling sections, the prospective purchaser can work out the particular combination, out of a possible 54, that suits his needs and tastes.

• *When inquiring, refer to* **NS344**

New Uses for Recordings

The educational department of RCA MANUFACTURING COMPANY, INC., CAMDEN, N. J., presents two new booklets that contain new uses for recorded music in the first, second and third grades of elementary schools and a comprehensive listing of special recordings for use in schools, from kindergarten to college. The first booklet is entitled "Victor Records for Integrated Units of Learning" and

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To get further information conveniently, refer to products by key numbers. Each product or new literature item in the What's New section has a key number. For key of products described in advertisements use key numbers assigned to advertisers as listed in the adjacent advertisers' index. These key numbers should be used when writing manufacturers direct or when using this self addressed mailer which requires no postage.

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The NATION'S SCHOOLS—October 1941

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CHICAGO, ILL.

NEW LITERATURE (Continued)

(*Continued from page* 94)

the second, "Special Victor Records for Use in Schools." Both are available on request.

• *When inquiring, refer to* **NS345**

Lathes for All Purposes

An 8 page condensed catalog describing the entire line of the SOUTH BEND LATHE WORKS, SOUTH BEND, IND., has recently been issued by the manufacturer. The data cover basic dimensions, capacities, speeds and feeds of back-geared screw cutting lathes. Attachments for tool room and production are also described and illustrated. Copies of the catalog are available upon request.

• *When inquiring, refer to* **NS346**

Pictographs Cover Many Subjects

Concise, clear-cut charts on a wide range of subjects are presented in a folder issued by the PICTOGRAPH CORPORATION, 142 LEXINGTON AVENUE, NEW YORK, N. Y. Of particular interest to teachers, it is said, will be the catalog listing of "Instructions for Chartmakers," a booklet that explains how teachers and pupils can prepare their own pictographs.

• *When inquiring, refer to* **NS347**

Lock Control for Lockers

Lock control problems, such as loss of keys and the necessary replacement; deposits and refunds, and the standardizing of miscellaneous padlocks, are discussed in a new booklet published by YALE AND TOWNE MANUFACTURING COMPANY, STAMFORD DIVISION, STAMFORD, CONN. Several methods of solving the difficulties are offered and illustrated.

• *When inquiring, refer to* **NS348**

Reach-In Refrigerators

General and detailed specifications on the complete line of Carrier reach-in refrigerators are included in the 12 page catalog released by the CARRIER CORPORATION, SYRACUSE, N. Y. All models are illustrated with photographs and diagrammatic sketches. A special section is devoted to biological refrigerators and frozen food compartments.

• *When inquiring, refer to* **NS349**

Protective Fencing Catalog

The protective qualities of chain link fences are illustrated in the new catalog No. 110 published by the ANCHOR POST FENCE COMPANY, BALTIMORE, MD. Forty pages of text and 60 illustrations show 14 different models of fences in various settings. A composite table gives pertinent information about all types of fencing included in the Anchor line.

• *When inquiring, refer to* **NS350**

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Side Glances—

THE 500 pupils live within a few blocks of the school but no one goes home for lunch because the lunch period is a part of the unified experience of the school day. How their daily lunchroom experience affects the citizens in the Edgewood School democracy will be told next month by Principal Sue Carlisle of Homewood, Ala.

IS IT supervision or just classroom inspection that takes place in many of our small school systems when the superintendent pokes his head in the door? Supt. Roald F. Campbell of Preston, Ida., has set down nine principles of supervision to guide the chief supervisory officer of the school system. They will be published in December.

PRE-PRIMARY education has its own philosophy and technics, its own housing and equipment problems. All of these will be expertly covered in the forthcoming December portfolio.

HOW the schools in Crystal City, Mo., cooperate with local manufacturing plants in training for the jobs available in the community will be graphically told next month by H. B. Hanes, head of the commercial department of the Crystal City High School. Mr. Hanes' article is a follow-up on the Commercial Education Portfolio of August 1940.

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This pledge is underlined and italicized three times every twenty-four hours by the long lines of workers in each change of shift. Every resource and facility gained in filling the diverse optical needs of education, research and industry is being concentrated in maintaining an unbroken flow of optical instruments to America's front lines of defense and to America's defense industries.

Many are the Bausch & Lomb products that help to "keep 'em flying." There are bubble octants for aerial navigation; photo lenses for mapping and reconnaissance, height finders, searchlight mirrors and flank-spotting scopes for anti-aircraft defense; binoculars for spotters; Ray-Ban Glasses for fliers.

The accepted optical aids to industry developed by Bausch & Lomb—the Contour Measuring Projector, the Metallographic Equipment, the B & L Littrow Spectrograph—are now in the first line of production, doing important work in keeping them flying.

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BETTER PLANT PRACTICES

Custodians Stand By

The defense program has resulted in little turnover in the ranks of the custodial personnel, according to a recent survey among school systems throughout the country. Most of the men are married and many of them above the age for selective service, it is revealed. Furthermore, they appreciate that their work is steady and, therefore, are not attracted to any great extent by higher wages, which they know to be only temporary. Such vacancies as have occurred because of defense work or calls to service have been filled with little difficulty and without resorting to employing women. Minor wage increases are noted but such adjustments are applied to specific classes of help.

Briefly, the situation as it stands today is as follows: Hartford, Conn., despite the fact that it is in the very center of defense activities, has lost but two out of a staff of 150. Lubbock, Tex., reports a greater loss, but of the approximately 10 per cent of the staff who went into defense activities half have returned to duty. There has been no wage increase.

San Antonio, Tex., reports some loss but no difficulty in making replacements. An advance of $5 per month has been given to all custodians receiving less than $90 monthly. Altoona, Pa., reports a loss of five out of 125 and a slight advance of wages in certain positions. Bremerton, Wash., has lost but one man thus far. Salaries for those below the maximum of $1860 have been raised $60 a year. The minimum beginning salary is still $1500. Topeka, Kan., has had no losses and has not increased wages.

"Three men out of 35" is the word from Wichita Falls, Tex., with an increase in all custodial wages. McKeesport, Pa., has suffered no losses and has not raised wages. Two or three losses have occurred in Amarillo, Tex., with salary increases of from $5 to $10 a month to those men who have been employed three years or more. Boulder, Colo., reports no losses and no wage increases. In Keyport, N. J., there have been no losses but wages have been increased.

Steady Work Preferred

Bremerton, Wash., has lost but one man, despite the presence of the Navy Yard. Charlotte M. Ross, secretary of the board of education, believes this is because the men know that their jobs with the district are steady and their pay is good for the type of work.

"We feel that we have an exceptional group of men, and they do fine work for us," Miss Ross points out. "The district requires from its applicants for positions on the custodial force (1) personal integrity, (2) loyalty to the district, (3) an alert and courteous manner, (4) willingness to work and (5) willingness to work under direction.

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"Each new man works with experienced men until he is familiar with the work. New men are usually placed in the high school building until they learn the work thoroughly before being placed in a building of their own.

"Insofar as possible we hold to an eight hour day and if the buildings are cleaned Friday nights the men are not required to be at their buildings on Saturday. For evening activities the men are paid $1 per hour overtime."

Hartford Suffers Few Losses

The small turnover in Hartford, Edwin F. Nelson, assistant superintendent in charge of business affairs, attributes to the salary schedule, an effective policy of upgrading in the custodial service and a desirable retirement plan. "The only serious problem we have is our difficulty in providing substitutes for the usual absences because of illness," Mr. Nelson declares. "At present, we are handling this by 'doubling up' on the job. School administrators might find this an opportune time to put their custodial service on a career basis."

Wichita Falls Raises Wages

In Wichita Falls, Tex., a salary increase to all custodians has been found necessary because of increased living costs.

Joe B. McNiel, business manager, states that all applicants for custodial positions in Wichita Falls are expected to have a high school education or its equivalent, must be in good physical condition, possess a fairly good personality and be able to do such odd jobs as carpentering, painting and plumbing. For one week early in the summer a school is held for all custodians.

Once a man is selected, he is usually a member of the force for a long period.

Amarillo Has School

"The senior men at Amarillo, Tex.," George E. Waddill explains, "are instructed to give the extra men every opportunity to learn all of the details about the work.

"We furnish new men with copies of the rules, general instructions for care of school buildings and an outline of their duties. We also call our men together about four times during each school term for lectures about different phases of the work. The lectures are usually by outside men, such as the laboratory technician from the city health department, a man who can give instruction on the proper handling of steam boilers or some school principal, superintendent or business manager. We sometimes have demonstrations by some of our more experienced men.

"We have started an annual janitor-custodian school, sponsored by the Texas A. & M. College, which furnishes three competent instructors. These classes are participated in by all custodians and maintenance men; sometimes there are sections for teachers, principals and supervisors to stimulate better cooperation between custodians and instructors.

"Our turnover in the custodial staff during the depression and up to two years ago did not average more than 1 per cent. However, during the last two years, the turnover has been something like 8 per cent."

Turnover Low in Topeka

At Topeka, Kan., according to G. C. Kempton, superintendent of the buildings and grounds department, all employes are placed on a probationary period of six months and during that time are given special training by the experienced custodians. "Turnover in our custodial staff," he states, "is probably one or two a year. Wages for custodians range from $100 to $136 a month; for matrons, $85 to $90 monthly."

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LOOKING FORWARD

Priorities

THE growing dislocation of production for civilian consumption as a result of increasing demands for materials for national defense is already seriously affecting school supply and equipment manufacturers. Potential shortages in different material categories will rapidly produce a condition under which educational needs will be completely neglected unless local school systems do something about it.

The suggestion of the National School Supplies and Equipment Association that each supply and equipment order carry with it the official certification that the material is essential in the operation of the public schools is worth following. In addition, it may be helpful if community school administrators write their congressmen and senators concerning any difficulties they may have in obtaining material for school operation purposes. The public schools are the first line of internal defense. They also have priority needs.

Ellwood P. Cubberley

IN THE death of Ellwood Patterson Cubberley on September 14 at the age of 73, public education lost one of its outstanding teachers and writers. His active professional career, beginning in 1891, covered half a century, the great period of expansion and socialization of public education in the United States.

Indiana, the home of many outstanding educational leaders of the twentieth century, was responsible also for Ellwood P. Cubberley. He attended public school in the Hoosier state, was graduated by Indiana University in 1891 and acted as president and professor of Vincennes University for the next five years. He left Indiana to become superintendent of the schools of San Diego, Calif., and after two years was called to Stanford University in 1898 where, as assistant professor of education, he taught courses in history and administration. He completed the master's degree in 1902 and the doctorate in 1905 at Teachers College, Columbia University.

Upon his return to Stanford he was advanced to a full professorship and in 1917 became dean of the Stanford School of Education, a position held until his retirement in 1933. As dean emeritus, he devoted the remainder of his life to study, writing and editorial work.

Regardless of name or location, a university campus is a relatively restricted space and the influence of even the most gifted classroom teacher seldom reaches far beyond it. Dean Cubberley extended his teaching influence to the entire United States through his writings. He developed an easy, flowing style that made his books much sought after. From 1902 until his death, he produced 20 books and survey monographs in addition to many pamphlets; he also acted as editor of the Riverside Textbook Series. He participated in a number of school surveys, beginning with Baltimore in 1911 and concluding with Salt Lake City and Oakland in 1915. From 1920 to 1925 he served on the educational research division of the Commonwealth Fund.

His writings in history and administration became standard and he was popularly referred to as "the best seller in education." As the most consistent and rational exponent of the empirical school of thought in school administration, his writings were outstanding contributions in this developmental period of American education.

Dean Cubberley was an indefatigable worker, with practically no hobbies or dominating outside interests. He was a grave man without much sense of humor and was inclined to take life seriously. In later years he was particularly pessimistic about what he considered to be the destructive influence of European immigrants upon the Puritan tradition. Despite serious illness and physical disabilities, which began as early as 1917, he disciplined himself to a work routine that would have tried many a younger man.

Dean Cubberley was an unusually clear and interesting speaker and those occasions when he traveled from coast to coast were marked by speaking engagements clear across the continent. In a period when most professional speakers read dull papers poorly, a dynamic teacher who told his story without written papers or

notes had great appeal and Dean Cubberley ranked with Judd and Suzzallo for effective speaking.

The man was unusually frugal; his tastes were simple and he saved his money, investing it conservatively and regularly. Shortly after he retired, the educational world was startled to hear that a professor had accumulated more than half a million dollars. This amount he gave to Stanford for a new education building and later added $50,000 for library endowment. Despite the American propensity for evaluating services in terms of money, these gifts were the least of Dean Cubberley's real achievements; his chief contribution to public education was as teacher and writer. He was a forceful personality, idealistic in outlook and thoroughly imbued with the vital importance of public education to American democracy. He not only taught the history of education and its structure but developed within his students and his readers something of the idealism and courage that permeated his own teaching and his own life.

Elementary Teaching Load

THE continued decline in elementary enrollment may be used constructively in urban school systems to reduce the much too high loads carried by elementary teachers. The stimulus and justification for increases in teaching load were derived from so-called research into the effect of class size upon promotion and failure. Since promotion and failure are subjective factors, easily controlled administratively, the validity of these crude researches is doubtful. They merely indicated that class size is only one of a series of factors closely related to promotion and failure. Much of the inefficiency in reading and arithmetic on the secondary level is the result of unwarranted increases in class size.

Schools Are Not Godless

DIRECT propaganda against the public schools by organized religious sects is not of recent origin. Reports from the field indicate that it has been greatly accelerated during the past decade and is causing more worry to the teaching profession. This acceleration coincides so closely with the decline in rate of institutional growth as indicated in the United States religious census reports that it might be considered part of an institutional defense mechanism. The argument may be built somewhat as follows: Churches are losing ground. This condition cannot be the fault of the churches. Competing agencies must be to blame. The public school is a competing agency. The public school is to blame.

The purposes of our organized religious persuasions are excellent and it is our fond hope that the several churches in this country will grow in the effectiveness of their fundamental teachings and also in numerical strength. Individual ministers and priests are frequently some of our most exemplary characters. Their lives bear eloquent witness to the strength of their ideals. When, however, the individual is merged with the institutional pattern and the institution itself has a definite temporal, as well as spiritual, character and program, it is not unusual to find that the best attributes of religion are frequently subordinated to institutional power-urge. Churches that have large temporal investments and are confronted realistically with the problems of big business tend to be just as selfish as our more temporal agencies.

The serious student of institutions and institutional propaganda cannot escape the implication that several organized religious persuasions are consciously or unconsciously directing a specific propaganda against the public schools which, if successful, would force these community social agencies to assume an apologetic defensive for their alleged shortcomings.

The chief cry of these propagandas is that the "public schools are godless" or "the public schools are atheistic." These are serious charges in a country so fundamentally religious as the United States. These propagandas have already succeeded in placing the schools on the defensive in certain states. They have also penetrated the thinking of many business men and educators. Only recently the American Association of School Administrators formed an alliance with the U. S. Chamber of Commerce and one of the program objectives is to develop a plan for religious training within the public schools.

The state and church were fortunately separated early in our history. If our democracy is to continue and to avoid the sad experience of other countries in which these two institutions were united, the church must remain forever separate from the American state. Close association is equally dangerous to the welfare of both institutions. The right of every individual to worship according to the dictates of his conscience, to belong to an organized church or to refrain from belonging is guaranteed by the constitution.

It is no more the business or the privilege of the U. S. Chamber of Commerce or of the American Association of School Administrators to determine a specific pattern of belief or ritual for the public schools of this country than it is for any specific church to do so. All such attempts should be looked upon by the community and teaching profession with grave suspicion. The responsibility for organized religious or sectarian teaching belongs with the 258 organized sectarian persuasions. This is decidedly not the responsibility of the public schools. The American public school is conceptually impartial, nonpartisan, nonsectarian and classless. Let every teacher and parent strive to keep it so.

Within the limits of its nonsectarian character, the public school is not godless and it is high time that the teaching profession began aggressively to refute this sectarian propagandistic nonsense. If by religion, stripped of its sectarian implications, we mean teaching the brotherhood of man, respect for the sacredness of personality, the importance of individuality, neighborliness, tolerance for the beliefs of others, fair play, friendliness, charity toward the unfortunte and a high idealism in personal, social and national relations, then the public schools not only are religious but constitute a most powerful and vital force for the development of religion in its highest expression in practical living.

George D. Stoddard

THE selection of Dr. George D. Stoddard, dean of the graduate school of the State University of Iowa, as commissioner of education in New York, beginning July 1, 1942, deserves commendation. The primary basis of selection in the case of the last three commissioners appears to have been insistence upon a sound philosophy of American public education and outstanding scholarship. Technical administrative qualifications were rightfully judged of secondary importance.

Dean Stoddard is a relatively young man who has made an outstanding reputation as a research scholar in educational psychology, particularly in preprimary learning. He has also served efficiently as dean of the graduate school at Iowa. He should prove a worthy successor to Dr. Frank P. Graves. The board of regents is to be commended upon so successful a completion of its three year search for an outstanding commissioner.

Adult Health

EMERGENCIES sometimes produce strange incidents that may have either humorous or serious implications. During the summer of 1940 President Roosevelt watched some national guardsmen in their early training days maneuvering in the East. They were green and soft and showed clearly their lack of conditioning. The President was discouraged and said so. Sometime later he was waited upon by one John Bernard Kelly, tough Olympic rowing champion (1920) and now a ward politician in Philadelphia. Kelly, an enthusiastic athlete in his own right, outlined a dramatic plan for "toughening up" America. The president listened and said, "Write me a letter."

Last fall Kelly produced his plan which included the humorous "run-a-mile, swim-a-mile, row-a-mile-within-an-hour" standard of adult physical fitness. To apply the Kelly formula to our adult population might be even more disastrous in fatalities than war. He has also produced many other fertile ideas for middle-aged adults that struck eastern columnists as funny. Everyone imagined that tough Mr. Kelly, who at 51 still appears to be considerable of an athlete, was just another "forgotten man" after the November election.

It now appears that John Kelly was not forgotten but merely misplaced in the presidential file. During the first week in August the sturdy Mr. Kelly was appointed physical director for the nation within the civilian defense organization. Mr. Kelly proposes to enlist a galaxy of professional athletes to act as his assistants in the "hardening work."

So far the episode has its humorous aspects. The picture of adult United States having its physical fiber toughened by one John Bernard Kelly, Jack Dempsey, Joe Louis, Gene Tunney and others is something for a healthy imagination to conjure with. Emergencies, however, cause people to take seriously what, under normal conditions, might be laughed out of court. If Mr. Kelly is to be taken seriously by the American people, the situation is decidedly not humorous.

The problem of improving the physical condition of adults is something for the specialist. It is primarily a medical problem, as well as a problem for the trained technician in physical education. It is nothing for the amateur regardless of how naturally gifted he may be as a specimen of physical toughness. The average adult today requires a less rather than a more strenuous program of recreation and play. Too heavy exercise in adult life accounts in large measure for the failure of men to increase longevity. There is much medical evidence on this score. The adult male rests much too little and fails to understand the need for complete relaxation from the accelerated pace and pressure of daily life. In the midst of the unusual strain of preparation for war, the adult, particularly, needs more time out of doors and longer periods of rest both in and out of doors. Neural hardiness and ability to stand the strain are more desirable than mere physical toughness.

Here is an opportunity for physicians and physical educators to protect the people against possible foolishness and great harm arising from a political whim. Programs of adult physical education and recreation planned for promulgation in every hamlet and town by our tough Mr. Kelly should be carefully scrutinized and modified when necessary, instead of permitting misguided enthusiasm for physical toughness to produce widespread harm to our civilian population. There is a sufficiently well-organized body of knowledge concerning the value of exercise at different age levels so that the totally unsuitable methods of the prize ring need not be projected into adult life.

Here is an opportunity for intelligent leadership by the public schools.

The Editor

A County-Wide Survey as a

FRANCIS L. DRAG

RURAL education, although even farther removed from the realities of life than is education in city areas, is particularly favored with the unique opportunity to revitalize its entire curriculum in keeping with social needs. Nowhere are conditions more propitious. Nowhere can a greater service be rendered to mankind, if only rural education can acquire the full vision of what is to be realized in the development of the community school.

The following report concerns such a vision caught by educators and community members in a typically rural county in northeastern California where teachers and citizens have aroused themselves to devote serious and painstaking study to education and its relation to community life.

The initiation of a school-community survey in the fall of 1939 introduced a long term in-service program of curriculum development in its relation to community life in Modoc County. Because the administrators and teachers realized that the immediate environment, the nature of the child and the learning process are all significant to curriculum development, it was believed necessary, first of all, to examine carefully school and community conditions that were in any way related to the growth and development of boys and girls.

The accompanying questions concerning the effectiveness of the schools in providing a sound educational program had been recognized for some time by the group as being in need of serious consideration and serve to illustrate the practical needs in the situation.

Such problems gave support to the conviction that only through a painstaking and critical study of the local area could an effective program of curriculum development be instituted.

It was our belief that the survey not only is a technic through which teachers can find satisfactory approaches to the realization of the needs of their communities by developing a wider knowledge and deeper understanding of contemporary problems but also offers the additional advantages of being definite of application, of including all levels of development from kindergarten through the senior high school, of enlisting the whole community in the curriculum program, of bringing those participating to grips with problems close to home and of offering the opportunity to reach out into a continually larger and increasing range of expanding interests related to curriculum building.

Teachers had little difficulty in selecting areas for investigation. It was recognized that the economic and social welfare of the people was dependent upon land and natural resources, inasmuch as the principal industries are agriculture, lumbering and stock raising, and that the problems rooted therein are numerous and significant to the well-being of everyone.

Because of the great possibilities for utilizing natural facilities and the apparent lack of developed recreational programs in the county, recreation became a second area for intensive study. For years community members had deplored the failure to preserve the wealth of historic realia in the community. No attempt had been made to preserve either memoirs and historic fact or museum material. Teachers became eager to collect such information realizing, as they did, its educational value to the community.

Health, because of its inseparable relation to the school program and because several projects participated in by the school related to health in the community, became a fourth point for investigation and study.

The fifth point, of course, was the school itself. A survey of the curricular offerings, a status study of pupils, a study of the school plants and equipment, a study of the high school graduates of the area over a period of ten years and a study of the financial conditions affecting education comprised the principal areas of intensive group endeavor.

Space permits only a brief statement covering the kinds of data that are being gathered and the technics

Questions That Prompted Rural Community Survey

1. Is there a need for closer articulation of elementary and secondary schools?
2. Is more careful guidance needed to assist the individual pupil in solving his problems, both in and out of school?
3. Should the program of the school be built more largely from the resources found in the community?
4. Should the school and community work more closely together, both for the education of the children and for the improvement of community conditions?
5. Should a different and more adequate education be provided for young people who do not require the traditional academic college preparatory course of study?
6. Do teachers need to develop a greater awareness of their responsibility in stimulating understanding by the public of present social conditions, particularly with regard to those in the local area?
7. Should the schools make a study of land, timber and wild life in the local area, with particular reference to the proper utilization of natural resources?
8. Should the curriculum be examined more carefully for evidences of unsound teaching practices?
9. Should educators examine carefully the purposes of our democracy, especially as these purposes apply to education, so that we can make the fullest use of democratic procedures in all of our educational endeavors?

Prelude to Curricular Changes

General Supervisor, Modoc County, California

used in each case for carrying on the work in the areas of the survey.

Historical Background. Strong emphasis is being placed on the collection and preservation of that invaluable and rapidly disappearing fund of historic knowledge possessed only in hidden personal records and memories of pioneers who are leaving us with increasing rapidity. Written records are being augmented through the collection of pictures and slides, together with accurate and full description of all historic realia in the county, such as buildings, monuments, markers, relics and collections.

Another important phase of this work is that of collecting historic materials as a basis for tales of pioneer history depicting the character and lives of first settlers in the community.

Natural Resources and Industries. The study of natural resources includes geology, climate, water, flora and fauna. The purpose is to gather complete records of geologic formations, soil types, climate and the common flora and fauna within the region. An important aspect of the study will be to investigate conditions for the utilization of soils, water, timber, forage and wild life now, as compared with earlier days, and especially with regard to future use. Local industries are a related part of the study, especially those that depend for existence upon the natural resources within the community.

Recreation and Leisure. This important part of the survey is covered in several ways. A general guide is used by the committees to gather information covering population, public finance, administration, public recreation facilities, leadership, programs, adult community activities, commercial recreation and the library.

In addition, a survey of pupil and parent interests is being carefully conducted by means of questionnaires, one for junior and senior high school pupils and another for adults.

Health. The health study is being made principally by the public health nurses and selected teachers. It includes the tabulation and study of results of county-wide health examinations over a period of eight years, statistics on general health conditions in the county obtained from the county health officer, government reports, results of immunizations, tuberculosis programs, sight conservation programs and welfare records. The program for health education is being examined in the school section of the study.

The School. This area includes the previously mentioned study of high school graduates in addition to studies of pupil status, including acceleration, retardation and drop-outs; school plants and equipment; teacher status; program and curricular offerings, and school finance.

The results of several parts of this section are being made available to teachers and school groups in planning group activities and individual course programs for this year.

At the time the general areas to be included in the survey were selected a list of items was prepared that would serve as a guide in collecting useful information. Some of the specific items are:

1. Slides and films bearing upon any phase of the local study.
2. Photographs of community life having a bearing upon education; for example, pictures showing original stands of timber, bunch grasses, settlements and historic buildings.
3. Slides in natural color showing resources and beauties of the area.
4. Historic materials in the community with complete history, location and availability.
5. Names of possible places to which school journeys could be taken, with data relative to best use of such information.
6. Sources from which information can be gathered; also special collections and materials.
7. Nature study and science materials; *i.e.* trees, plants, insects, animals, flowers, rocks and soils.
8. Printed and mimeographed educational materials with reference to local region.

As these lists develop they are constantly being expanded to include additional items of importance to the study.

A word should be said concerning the administrative organization for the survey. Because of the geographical conditions, the county was divided into five regions in considering the cooperative study. Teachers in each of these sections make up working units and are able to meet with-

Ultimate Goals of Rural Community Survey

1. To help the teachers become more completely oriented to the rural environment and the possibilities it offers for curricular improvement.
2. To evaluate the present educational program in the light of the needs of society here and now.
3. To unearth a wealth of instructional materials hidden in each section.
4. To help the teachers understand the social, economic and political problems of the nation at large and their relation to local conditions.
5. To find ways of modifying the educational program to meet the needs of the community.
6. To help the people of the community understand the purpose and program of the schools as a result of participating in the joint undertaking.
7. To help the public come to grips with some of the basic issues of the day.
8. To get the community to feel the need for a school-community program of improvement.
9. To bring parents and citizens into the schools and to enlist their support in solving educational problems.

out undue effort and inconvenience. Three of the groups cluster around high school centers; two are smaller and are comprised of elementary teachers only.

Administrative and supervisory leadership emanates from the office of the county superintendent of schools. It is the responsibility of the general supervisor to function as director of the program. His chief responsibilities are to direct planning groups, to select materials, to assist with committee organization, to issue bulletins, to coordinate the activities of the several groups and subgroups within the county and to enlist the support and cooperation of lay persons within the county by meeting with such groups as parent-teacher associations, the forestry service, the agricultural extension service, granges and the historical committee of native daughters.

Another important function of the director is the handling of newspaper publicity in such a manner as to keep the public informed of the purposes of the study and the projects being developed in order to build a sympathetic understanding of the work and to enlist the cooperation of community members.

Several types of meetings are used in carrying on the study during the year. First, county-wide meetings are held occasionally at the county seat. On such occasions all teachers in the county come together to discuss general problems or to hear a report on some major plan. Such meetings are also held on occasions when a visiting consultant works in the county.

Second, sectional meetings are held every six or eight weeks in each of the five sections. At these gatherings, plans are formulated for committee work, reports are given and the results of surveys are discussed. In the third category are committee meetings at which the smaller subgroups work on their group and individual responsibilities. Here data are gathered, assembled and written into reports. Such meetings are held whenever the committee wishes.

What are to be the next steps in a long-term curriculum development program? Such a question is well worth pondering, for in a large measure the next steps will prove the worth of the original undertaking. As an outcome of careful study of the data, an evaluation of the present educational structure is to be made that will take full account of plant, equipment, finance, teacher load, training, course of study, pupil status, community needs, needs of graduates and recreation in the community. A set of definite and concrete implications for the school should result from such an evaluation and these implications should be used in perfecting the educational structure as follows:

1. To develop a statement of the philosophy, purpose and aims of the school and to show the need for further study by the group of current educational literature in the field.

2. To develop a statement of the principles of learning and effective teaching, and to point out the need for further study in this area.

3. To build a guide to instruction embracing, within general limits, some pattern upon which to build the curriculum content.

4. To aid in planning a program of continuous in-service growth.

5. To develop minimum lists of materials, books, films and supplies necessary to undertake successfully the program outlined.

6. To set up minimum standards for buildings, equipment and supplies.

7. To plan a program of community-school relations.

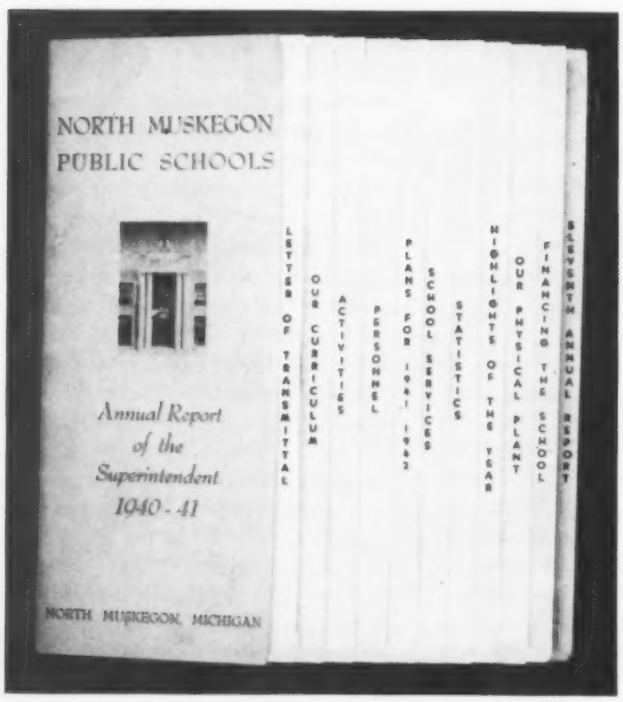
8. To provide basic criteria for the selection and building of evaluative technics necessary to determine the effectiveness of all aspects of the modified program of instruction.

North Muskegon Reports

THE 1940-41 annual report of the schools of North Muskegon, Mich., is, in the words of Supt. Max S. Smith, "a brief, concise picture of the educational program offered in North Muskegon."

Presented in a novel and attractive form, the report contains a summary of the progress made in the school system and lists activities and special services, plans for the 1941 school year and highlights of 1940.

At the conclusion of the report Mr. Smith has outlined seven ways by which the public can be educated for the common defense: These are: (1) by enriching spiritual life; (2) by strengthening civic loyalties; (3) by financing public education; (4) by developing human resources; (5) by safeguarding natural resources; (6) by perpetuating individual liberties, and (7) by building economic security.



Designed for readability is this annual report which sums up within the space of 20 pages the activities of the school system of North Muskegon, Mich., and presents school patrons with an accurate picture of what their schools are doing.

Classroom Teacher—

Community Relations Specialist

LILA McKINNEY
Second Grade Teacher, Glencoe, Ill.

THE classroom teacher is fortunate in that she is in a key position to build better cooperation and understanding between the school and the community. She is the person who comes directly in contact with the children of a community and this, without question, affords her an enviable opportunity for carrying on the best possible community relations program.

The teacher's principal task in furthering good public relations is to do as good a job as possible of teaching the children with whom she comes in contact. This is the first proof any community desires. Having established her position, the classroom teacher can help build and carry on other activities in the community that will stimulate a genuine interest in the relationships of school and community.

Challenge to the Teacher

Many parents still feel that schools are for the children alone. This attitude is a direct challenge to every classroom teacher. She can help to break down this traditional attitude by creating a friendly cooperative relationship with parents. Encouraged by the teacher, parents will feel the need for participating in the activities of the school.

Parents need to be encouraged to come into the school voluntarily and talk with the teacher instead of waiting until some difficulty arises and they are called in. This is one of the teacher's best opportunities to explain the purpose and values of the school and the methods that she is using in working with children.

There are many contacts a teacher can make with parents of children under her direction. An informal party for the mothers may be planned by the children and teacher. Even the youngest children can accept some responsibility in planning a simple party of this kind. It makes an ideal situation in which parents can see how an activity program of education utilizes the "three R's." Some of the learning experiences that grow out of the planning and activity involved in this kind of party are composing and reading recipes for the refreshments served, writing an invitation, shopping, balancing the accounts of the party expenses and measuring the ingredients for necessary cooking.

This type of activity may be purely social while the children are present but they may leave after the social hour and give the parents and teachers an excellent opportunity to discuss immediate questions. On such occasions members of the staff who do not come in daily contact with the children, such as the principal and the counselors of art, music, science and reading, may well be invited in to become acquainted with the parents and to assist the teacher in answering specific questions. It is important that parents know all members of the school staff who contribute to the educational program of the children.

Parents should be drawn into active participation within the classroom. They can be invited to assist in planning trips with the class and to help with cooking, gardening, sewing, knitting and other projects in which pupils are interested.

Determining Parents' Interests

The interests and resources of the parents can be determined by a survey such as was carried on by seventh and eighth grade children in the public schools of Glencoe, Ill., under the direction of Mrs. Miriam Sutherland, classroom teacher. The results of this survey have been filed and cross-cataloged so that the interests of the residents of the village can be used by the teacher in her classroom. These interests were found to vary from sun hat collecting to travel talks by a member of Admiral Byrd's South Pole expedition. Through such participation parents have an opportunity to observe children other than their own in addition to seeing their own children in different surroundings. In this way they are able to gain insight and understanding in dealing with their own children.

This type of participation can be incorporated into any school program by asking for volunteer service.

Another group activity that includes parents, children and teachers is a village fair or an old-fashioned box supper in which organized groups of the village may be invited to participate. The Boy Scouts are always willing to be traffic assistants and guides; a dramatic group can assist with the entertainment, and the chamber of commerce can help with selling of refreshments, such as ice cream and pop.

Barriers Broken Down

Through such participation will come democratic living. Adults and children playing together tends to break down barriers that otherwise may remain untouched. A spirited country dance or a mother and daughter baseball game may help some of the parents to see the importance of "learning to live together" in the classroom.

Individual conferences with parents concerning their children afford opportunities for an exchange of ideas that are helpful in the guidance of the child. It is the responsibility of the teacher to develop her ability to take part in such a conference with adequate professional background, poise and diplomacy and with a friendly objective attitude. Out of such conferences grows better understanding not only of one's child but also of the school program and they convey ideas that are impossible in a written report.

The traditional attitude that most communities have toward the teacher will soon disappear when the teacher proves that she can participate in the life of the community as a respected personality rather than as a freak or an oddity. Only the teacher can do this for herself.

To break down this traditional pattern, the teacher must take active part in many activities of the com-

An excellent way to make contacts with parents is to invite them to a class party. In addition to drawing parents into the social orbit of the school, it provides interesting learning experiences for the pupils, such as planning and helping to prepare the refreshments. Photograph from board of education, New Rochelle, N. Y.

munity. The easiest way for her to know her community better is to play, think and work with the people who live there. Participation in discussion forums, sports and work in the school shop creates a natural situation for better understanding. If the teacher's interests lie in some already formed organization in the community it should be made possible for her to attend its meetings. I refer to organizations like the league of women voters and literary, business, music or dramatic clubs. The teacher should join these organizations as a person, not as "the teacher."

Perhaps her interests may carry her into participation in an adult educational program. This gives her an opportunity to share her ability with fellow members of the community. In turn, her friends will be interested in her profession, so it is her responsibility to know her own school program and to be able to talk about it in an assured, intelligent manner. Helping to interpret her school makes the teacher conscious of the growth and development of the program and by this means she may portray a profound professional loyalty to fellow teachers and administrators.

Not only is it imperative for a teacher to be well informed about her own school program but she must keep abreast of the developments that are continually taking place in the profession elsewhere. She can do this by affiliating with educational associations that will be of value to her. Active service in these organizations will give her larger perspective. Attendance at summer sessions in universities where she may come in contact with outstanding leaders in her profession is helpful.

The church and children's organizations have always been accepted activities in which a teacher should participate but too much emphasis cannot be placed on the urgent need for teachers to make contacts that do not actually involve children.

In this day and age when the profession realizes the importance of children's interests, surely teachers should be encouraged to follow the dictates of their own interests and seek within the community persons who share them. These interests should not be entirely serious. A certain amount of frivolity may be exactly what teachers need in order to come into their classrooms relaxed and ready to work with children.

Granted that such a program of developing better understanding and cooperation between the school and the community is a big order and that it demands a great deal of time and effort, it is still one that pays big dividends.

First, the teacher's own personality becomes better balanced as a result of her participation in various activities. The respect of the community is bound to follow her friendly, intelligent, sympathetic relationships with the parents and out of this will come security in her position and professional growth.

Second, the teacher creates a spirit of enthusiasm in the classroom that stimulates the children because she is more alert, better informed and has developed an encouraging, cheerful manner toward them.

Third, the teacher acquires a better knowledge of her school program and becomes recognized as a specialist in the age level that she directs. This develops a confidence among parents that nothing else will.

Fourth, the teacher gains the privilege of living in a community that respects and appreciates her for her ability, her versatility, her well-balanced personality instead of labeling her as a minor public servant.

After all is said and done, the classroom teacher is "it" in the game of public relations. The rules for the game are friendliness, alertness, efficiency, cooperation and willingness to give of oneself and one's time.

Elementary School Principals

Their Rôle in Administration

L. E. LEIPOLD
Principal, Adams School, Minneapolis

IN BOTH theory and practice the relationships of the elementary school principal with his associates are vague and unclear. Not only is there a lack of unanimity as to the goals and purposes of the office but many principals themselves are not in agreement concerning their functions. This study grew out of an interest in the problems indicated by the varied practices prevailing in the administrative organization of our elementary schools, which neither clearly define the functional activities of the principal nor determine the relationships that exist between him and his associates in the performance of these activities.

Principals in 65 cities of 50,000 population and over provided this information by means of a questionnaire. They were divided into three groups: (1) cities of from 50,000 to 200,000 population; (2) cities of from 200,000 to 1,000,000 population, and (3) cities of more than 1,000,000 population. Enough cities in each category were selected by random sampling to provide approximately equal total populations for each of the three groups. Fifty cities in group 1, 13 in group 2 and two in group 3 were selected to participate in the study. From each of the three groups, 100 principals were selected by random sampling. It was these 300 principals to whom questionnaires were sent to obtain the information for the study.

Results of Questionnaire

The following conclusions were drawn on the basis of the returns on the questionnaires.

Teaching Personnel. The initial selection and placement of teachers is primarily a function of the superintendent and the initiatory power of the principal is limited. Less than one principal out of three participates in any way in the selection of teachers, although when a teacher is assigned to a building such assignment is usually made after a conference between the superintendent and the principal. Frequently, assignments are made arbitrarily.

Eighty per cent of the principals are sometimes consulted in the appointment of new teachers to the building and half of them have the right to veto proposed teacher assignments to their buildings. Concerning the promotion, transfer and dismissal of teachers, the principals cooperate with others in the performance of the function. The majority of them have the right of initiation in these matters but the function is actually carried out by the central office officials. The rating of teachers belongs to the principal, as a duty, in a majority of the schools.

Curriculum Construction. The appointment of curriculum construction committees, and the subsequent writing of course of study units, is a function that is delegated to the principals in only a few schools; however, in approximately half of the schools they have the right to initiate these functions. Although most of the principals participate in some way in the revision of course of study units, as a delegated duty it belongs to a variety of officials, with a third of the schools assigning it to the principal. The actual adoption of new units is a central office function, although most of the principals participate in some way in it.

Pupil Accounting. The determination of record forms is primarily a function of the central office. The principal participates in this matter in a large majority of cities, although the power to initiate decreases with the size of the cities. The actual adoption of new record forms is a duty of the central office in virtually all of the cities and the power of the principal to initiate such adoption is limited. All of the principals may initiate in the making of classroom schedules, but in only three fourths of the schools does the principal or the teachers actually make them.

Teachers or principals determine standards of promotion in about half of the schools, although almost all principals help to do this to some extent. The same is true of the determining of the procedure of reporting to parents; however, no superintendent gives his principals full authority in the matter. The school census is taken by the central office in most cases, although some principals have it assigned to them as a function and most of them participate in it in some manner.

Control of Pupils. In more than a fourth of the schools the principal is responsible for the enforcement of the attendance laws, with more than nine out of every 10 principals participating in the function. The right of the principal to make building rules that are not contrary to general system rules is virtually unquestioned. The suspension of pupils is a duty that belongs to the principal in most schools, although the power to expel belongs in general to the central office. The principal's right to initiate in both matters is commonly recognized.

Principals May Initiate Tests

Testing. While many principals may initiate a general testing program, its development belongs to the central office, specifically to the superintendent. The determining of the testing procedures likewise remains with the superintendent or his staff. Provision for additional testing within the building is made by the principal in most schools and when it is not given to him as a function he has initiatory power concerning it.

Testing for special classes is a special function and, therefore, is usually done by a special supervisor working out of the central office. The principal may initiate, however. The selection of tests for a general program is made by the central office in most cases and almost a fourth of the principals do not participate in any way in the selection.

Guidance and Extracurricular Activities. While almost all principals have the right to initiate the planning of a guidance program and participate to some extent in the planning, the duty of actually planning it is delegated to them in only half of the schools. A greater number of principals are given the duty of executing the program than are permitted to plan it.

The determining of a physical education program is done by the central office in most schools, with the final responsibility resting on the special supervisors. Determining the nature of the extracurricular program rests with the principal in about half of the schools, although the allocation of duties pertaining to the program is primarily a function of the principal in three fourths of the schools.

Janitorial Staff and Building Needs. The hiring, placing, promoting, transferring and dismissing of janitors are functions that distinctly belong to the central office. Few principals initiate in these matters and few participate in any way in performing the functions. The selection of building substitutes is in this same category. In at least half of the schools the principal is responsible for the performance of janitorial duties; the right to initiate in this matter is in inverse ratio with the size of the cities concerned, *i.e.* it is greatest in the smaller cities and least in the larger ones. About half of the principals determine requisitional procedures, especially in the smaller cities, a condition that is true in regard to equipment and supplies inventories also. Most of the other principals cooperate with other officials in the performance of these functions.

Allocation of Funds

Few principals help to determine allotments and only a third of them determine special equipment needs. Approximately a fifth of the principals assisted in planning the budget procedures now in use in their school systems. All principals must approve requisitions and all are limited in expenditures to budget allotments although only a third of them help to determine the budget allotments. In a majority of systems, regular reports are made from the central office pertaining to budget balances. Only 13 per cent of principals help to set up requisitional procedures.

Appointment and Service of Principals. In a majority of school systems, the principals serve a probationary period, generally of three years, during which demotions may occur. However, once appointed, principals are seldom demoted, especially in the larger cities. The principal's tenure rights are generally the same as those of the teachers, although sometimes the tenure rights of a teacher cease when he is appointed to a principalship. In a majority of schools it is the policy to promote principals to better positions within the system.

Observation of Seniority Rights

One fourth of the principals state that seniority rights are not observed when appointments are made to principalships and 30 per cent of the remaining principals state that seniority rights are seldom observed. In one sixth of the school systems, appointments to principalships are not made from outside the system; in another third of the cases such appointments are frequently made, and in two thirds of the school systems such appointments are but seldom made. A majority of the smaller cities have a retirement age, which is usually 70 years. Retirement ages in larger cities are less frequent.

Committee System and School Policy. In general, the superintendent is available at all times for conference with the principals. In some of the largest cities, however, this apparently is not true. Certain administrative and instructional problems are presented to other officials before they are presented to the superintendent. Regulations governing relations between the superintendent and principal are usually printed or mimeographed and adopted by the board of education. In small cities, the superintendent frequently deals directly with the principals.

In four systems out of five, the superintendent uses standing committees, the assignments being made by the superintendent usually after conferences with the principals concerned. These standing committees have the research facilities of the central office at their disposal. Proposals may be initiated by these committees but, usually, they make recommendations only and their actions are not generally accepted as policy. In a significant number of school systems, the superintendents require favorable committee action before a new policy is established in the system. Meetings are usually held irregularly and the superintendent meets with the committee. The committees are composed of central office officials, principals and representatives of the special field served by the committee.

Practice favors joint meetings of all principals with the superintendent. The superintendent or his assistant usually presides and central office officials attend the meetings.

Special committees to perform special functions are used in almost all school systems; they are appointed by the superintendent or his representative in the field served by the committee and report back to the appointing official. They may initiate proposals but usually their power is limited to making recommendations. Almost half of the superintendents refer important matters to the principals before taking action on them.

Home-School Relations. Few schools do not have a parent-teacher organization. Occasionally a school has a "mothers' club" but no P.-T.A. Principals aid in determining policies of the organizations, frequently serving as officers and usually approving their policies and programs. More than half of the principals are on the advisory boards.

Trend Toward Cooperative Effort

There is a distinct and significant trend toward greater cooperation among all personnel workers, with less authoritarianism prevalent and greater democratization predicted for the future. Policies are no longer dictated by one man or by a small group of men; they are products of the efforts of everyone working for the common good.

These reports are encouraging. Elementary principals are "taking their place in the sun." From humble beginnings the elementary principalship has developed to a position of professional leadership, with the principal not only supervising the activities of the individual school but constructing curriculums, planning programs and determining policies of the system as a whole.

A Teacher's Idea of Professional Growth

MARGARET SEBERGER
Supervisor of Homemaking, Monrovia City Schools, Monrovia, Calif.

IN A society such as ours difficulties that affect all of us arise when the needs of certain groups are not met. The specific problem in mind arises out of a ruling by various boards of education that a teacher in service must secure a certain number of credits at specified intervals in order to maintain the present salary level or in order to advance a step on the scale.

Such a requirement in one form or another exists now in many school districts. Thousands of teachers are affected by it.

The principle behind the ruling can be stated simply: The welfare of the child demands that the teacher grow while in service. With this objective we are all in hearty accord. The question raised here can best be phrased in the words of a teacher: "Should I not be permitted freedom in choosing the procedure by which I propose to achieve growth?" It is my purpose to show that some teachers in service can grow professionally without pursuing the traditional academic courses.

Too Much Emphasis on Detail

Many a teacher has become too involved in the job; she needs to get away from it all for a while. All during the year she feels that she has neither the time nor the energy to attend a concert or to stroll in the open country. During "open house" she is so careworn that she has no inclination to engage in friendly conversation with parents or with patrons in the community. She concerns herself too much with details. Theodore Roosevelt once said, "The joy of living is his who has the heart to demand it." Has this teacher demanded that joy?

At every turn we hear the admonition: It is the job of the teacher to meet the individual needs of the pupil. In the rôle of student, the teacher, too, has individual needs. Obviously, in a course designed for the masses (sometimes there are 200 or more in a group) a professor cannot hope to discover specific needs, much less do anything about them. Moreover, "to enjoy books about life one must really live it first." How much, then, can a teacher grow by merely sitting day after day listening to lectures and reading about the life she has not yet learned to live?

It is likely that the teacher realizes her need to learn how to play and how to relax; she may recognize the value of learning how to disagree without being disagreeable; she may wish to cultivate voice and speech with a view to engaging more joyously in the gentle art of conversation; she may observe that good public relations are, after all, merely good personal relations. In short, she may wish to take time out for the purpose of developing a deeper understanding of self.

Must Plan Time for Living

The accomplishment of such objectives demands definite purpose, sincere desire and ardent expectation; it necessitates wide reading, keen observation and persistent practice. It requires time set aside for this definite purpose, not time snatched from a superimposed purpose. And now is the time to begin planning for it.

What campus offers opportunity to attend concerts, to participate in folk dancing, to see plays, to take a week-end trip to a national park, to act as hostess in a residence hall for a short time, to become acquainted with students of other nationalities, to visit industrial plants, to hear lectures and open forums on timely topics, to take a moonlight boat trip? Abundant opportunities for both participation and spectator types of activities can be found.

Now, it may be argued that the teacher may need direction in such pursuit. Perhaps a certain degree of imagination is required to choose the right campus or living conditions that are conducive to relaxation, rest, play and reflective thinking. Experience helps, too. But, once having chosen the campus, if the teacher feels that she needs direction in charting the course for self-improvement why should not the university provide that counsel.

Again, it may be said: "But the university cannot give credit for such procedure without jeopardizing its standards." It is my opinion that for the present, at least, a distinct differentiation in the type of credit is justifiable. Moreover, a subjective measurement of the accomplishment may have to suffice.

Creative Expression Frees Spirit

It would be a keen delight to note that, as a result of setting aside a definite time for the specific purpose of self-improvement, there comes to the teacher an inspiration for creative self-expression. Be it music or play, poetry or prose, painting or ceramics —the medium matters not. Neither judge nor jury need be called in; personal gratification is sufficient justification and abundant remuneration. For creative expression not only gives vent to the emotion and satisfaction to the intellect; it also frees the spirit as well. Thus, there may result an integrated personality essentially free, free to attack the problem at hand instead of struggling with self. In consequence, the teacher may return to the classroom a much better leader of youth than the mere acquisition of academic subject matter could have made her.

Where is the answer to the problem of "meeting individual needs"? It may not lie in a university course at all. From observation and discussion, I conclude that the answer is not to be found in courses taken at random. The real solution, perhaps, is to be found in evolving a philosophy of life that permits one to live richly and joyously in the job day by day and to stay at home when the inspiration that prompts growth is to be found there.

This High School Is

Top: Exterior view of Leeds High School, Sioux City, Iowa. Above, left: The library is on the second floor with the science laboratory and other classrooms. Above, right: The combination auditorium and gymnasium. The floor is 50 by 75 feet and provision is made for seating 350.

Left: A typical classroom. Panels of glass blocks embedded in the partitions above the blackboard and locker areas bring daylight to the corridors. Opposite Page: Homemaking room. Unit kitchens that accommodate 24 girls occupy one half of this space. These units are fully equipped.

Designed for Community Use

LEWIS W. FEIK

Superintendent of Schools, Sioux City, Iowa

LEEDS is a small community located in the extreme northeastern section of Sioux City, Iowa. Although it constitutes one precinct of the city and has street car service to the downtown district, it is separated from the city proper by factory sites and some farm lands. Until the high school building was erected in 1939, it was necessary to transport junior and senior high school pupils 3½ miles by street car or bus.

The new Leeds High School is located near the east side of a 10 acre lot; it is two stories high of fireproof construction. An enrollment of 450 can be accommodated. Should the population growth of the community justify an increase of school facilities, an addition may be constructed without sacrifice of any present space. A $150,000 bond issue was authorized and $115,000 in bonds were sold. This was supplemented by a P.W.A. grant amounting to 45 per cent of the cost. A reserve of $35,000, therefore, is available for additional space when, and if, necessary.

The partial basement contains locker and shower facilities for boys and girls, together with space for mechanical equipment. The music room and lunchroom were placed beneath the stage of the auditorium because of the higher ceilings and greater isolation.

Home economics and manual arts departments and three classrooms are located on the ground floor, together with the administration offices, book rooms and supply rooms. The second floor houses the library, science laboratory and other classrooms.

Individual steel lockers are set flush in recesses provided in the corridor walls. An electric clock and program system connects all rooms. The corridors are daylighted by panels of glass blocks embedded in the classroom partitions above the blackboard and locker areas. All classrooms are adequately equipped with blackboards, bulletin boards, book shelving and cupboard space.

Vocational homemaking, vocational agriculture and shop work are emphasized. Sioux City is the first of the larger cities in Iowa to offer vocational agriculture. The shop unit is planned for a somewhat restricted type of general shop work in the senior high school division and for unit shop work in the junior high school. A room 25 by 54 feet was provided, with 12 feet partitioned off for a stock and finishing room at one end. This partition is glass so that the instructor has control of the whole room at all times. A steel balcony, 5 feet wide, runs along part of one side and affords space for storage of lumber and projects.

The vocational agriculture room is 21 by 31 feet and is equipped with tables and chairs, plenty of cupboard space, running water and good light. The agriculture shop is to be in a separate building.

The combination homemaking room lends itself readily to various arrangements. Twenty-four girls can be accommodated in the unit kitchens that occupy half of the room. Units are equipped with gas ranges, work cabinets, wall cupboards, sinks and movable tables. Adequate storage space is provided by built-in recessed cupboards across one end of the room. Adjustable shelves, racks for hanging garments, built-in ironing boards, broom closet and shallow drawers for pupils' supplies are among the conveniences included in this storage area.

The new school is used as a community center. The combination auditorium and gymnasium on the ground level is, therefore, an important unit in the building. There is direct access to the auditorium-gymnasium and to the locker-dressing rooms.

CONSTRUCTION DETAILS

CONSTRUCTION: Two story brick; fireproof throughout.
FLOORING: Classrooms, wood tile blocks laid over concrete. Corridors, stair halls and toilets, terrazzo.
WALLS: Classrooms, plaster, with glass block panels to afford daylighting of corridor. Gymnasium-auditorium, cinder blocks.
CEILINGS: Gymnasium-auditorium, acoustical board.
LIGHTING: Semi-indirect.
HEATING: Vacuum steam, automatically controlled.
VENTILATING: Classrooms, unit system. Gymnasium-auditorium, central fan system. Toilets, exhaust fan system.

Above: Azaleas are among the most beautiful flowers in the gardens. Right: Pupils tour the gardens in smoothly gliding launches.

On a Botanical

RICHARD D. POPE

AROUND the world in thirty minutes! That is what a combined geographical and botanical trip through Florida cypress gardens gives the boys and girls of the Polk County public schools every year. It is easy to visualize what the plants, flowers and other natural growth from far-off lands really look like after a thirty minute trip through the gardens. Gliding through canals and lagoons, with the trees, flowers and plants along the banks, the pupils see the flowers and plants as they would be in their natural habitat.

Tests that have been given following a trip through the gardens have proved beyond a doubt that pupils learn and remember much more from actually seeing the gardens than they do when such knowledge is obtained from a textbook.

Let us take a field trip through the Florida cypress gardens. We start from about 10 miles away, driving between sparkling blue lakes and winding in and out of the orange groves. When these groves are in blossom, the heavy orange scent makes the visitor think he is in Sicily.

The club house is built in the Spanish style and is shaded by the stately cypress trees which are draped in mantillas of Spanish moss.

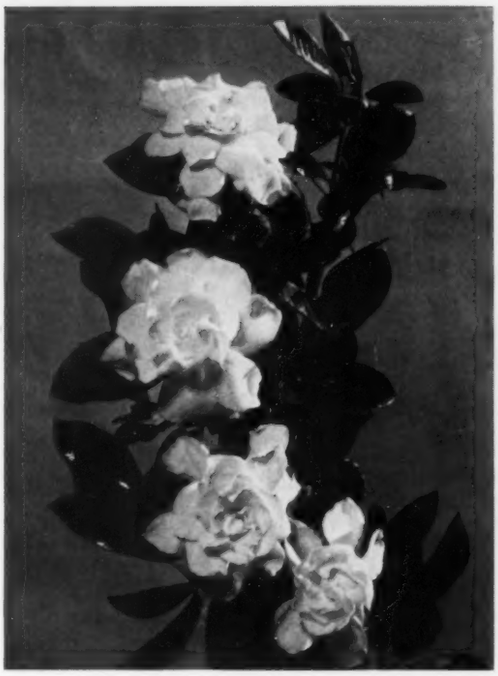
The cypress trees are a study in themselves, with their peculiar bases, hollow and enlarged over the remainder of the trunk, while the weird root formations, known as "knees," attract special attention. Used as breathers by the trees, these knees extend into both the water and the land.

This part of the trip has historical associations because some of these "knees" have been in Lake Eloise since the days of Ponce de León.

The next stop is Scotland as we enter the pathways and find Scotch heather growing, strangely enough, in the company of the century plants from the hills of Central America.

Choosing either the pathways constructed of pecky cypress, a peculiar wood that appears to be partly decomposed but, in reality, is perfectly normal, or a trip on one of the electric powered boats that glide silently through the canals, we begin actual inspection of the plants.

Among the interesting and unusual plants that can be seen by the visitor to the gardens are these papyri, or "Moses' bulrushes," which appear like bursting bombs or fireworks. They were used by the Egyptians as the basis of writing paper.



Left: From the Orient come these gardenias which bloom profusely throughout the gardens for nine months out of the year. Below: A member of the staff of the gardens examines the fruit part of the Monstera deliciosa, or "Mexican fruit salad," an oddity found in Mexico.

Voyage

President, Florida Cypress Gardens, Winter Haven

For the sake of comfort, we will take the boat ride for the glide around the world.

Formosa azaleas, as well as the Indian varieties, line the pathways, while in the background the cypress trees provide the trellis work for the striped leaves of the pothos or hunter's robe.

We see the graceful climbing ferns from India and the African acanthus, whose ornamental leaves served as a model for those on the Greek Corinthian columns. Also on the entrance pathway are philodendrons from the jungles of South America. From Burma comes the "red-hot cattail" with flowers that resemble a strand of paper decoration used at Christmas time.

While we are in the semitropics and tropics, we see the contribution of the South Sea Islands, *i.e.* brilliant fire dragon acalypha, the showbush and the screw pine.

The Orient is represented by the white gardenia. Also from this land of beautiful flowers come camellias, roses and the jasmine. From Hawaii comes the hibiscus, theme flower of the tropics.

The fishtail palm, white jasmine, sugar palm and ardisia from Malaya almost make one feel the surge and beauty of that part of the world. Alocasias of several sorts, forms of elephant ears, come from the jungles of Ceylon and Borneo, while the clerodendrons take one in imagination to Java. The appealing beauty of the orchid trees transports the visitor to India; the climbing Easter lily, to Mopal; the sky flower, to Bengal, and the coffee plants, to Arabia.

Next we start into the dark jungles of Africa when we view the papyrus from Egypt; the tulip and sausage trees; echeverias and other succulents; cape honeysuckle, palms and lilies. The famous traveler's-tree and the areca palms immediately transfer us to Madagascar.

The next port of call is Australia, which differs from the rest of the world both in plant and in animal life, where we see punk trees, bottle brushes and tree ferns.

On the return trip we stop in tropical America with its shrimp plant, pineapples, begonias, poinsettias, Surinam cherries and Brazilian pepper.

Traveling through Central and South America, we find the allamandas from Guiana, sisal hemp from Yucatan, tropical sunflowers from Guatemala and the famous *Monstera deliciosa,* or "Mexican fruit salad" plant, a fruit-bearing vine with strange perforated leaves, from Mexico.

Back again to the United States, and the last part of our flying trip around the world, we enter the original bayhead of Florida. This jungle is in its natural state with matted vines, trees and other vegetation. Alligators, water moccasins and the rest of the reptile kingdom of Florida and the semitropics can be visualized (but infrequently seen) in this final stage of the trip.

Tourists annually spend millions of dollars to see plants such as these, taking months to travel, while these school children can see the same flora exactly, at no cost. Pupils from any school in the United States are welcome to visit the gardens free, with a guide furnished.

Is Individualizing Overdone?

Pupils Do Have Common Goals

ETHEL R. deBECK

Research Director, Board of Education, Newark, N. J.

ARE we losing sight of the fact that the great majority of human beings have some common characteristics and traits?

The application of scientific methods to education within the last twenty-five years has revealed a wide range of ability and achievement of pupils in any one school grade and has done much to break the traditional lock-step methods in education. Other forces, particularly the child study movement, have contributed to the recognition of individual differences and have aided in an honest attempt to adapt curriculum offerings and instructional technics to meet variations in individuals.

Professional literature of all types has, for a quarter of a century, impressed upon the teacher that each child is a separate problem, demanding for his best interest an educational theory and practice that fit him. Within the last five years the Educational Index has listed more than a hundred articles under the heading "Individual Differences"; at least 10 books have been published on the subject, and many chapters in books on methodology have been devoted to it.

How Much Is Possible?

Diagnosticians in every subject-matter field have importuned the teacher to inventory individual deficiencies and to record improvement in each as individual remedial instruction is given. Health experts urge teachers to keep a constant check on health habits, to observe the first symptoms of disease, to see that children are properly clothed and well fed and to keep records of their observations. Eternal vigilance should be exercised by the teacher to discover budding genius or special aptitudes and special interests.

To which I simply ask: How much is possible? Where is the desirable theory of individual differences carrying us? We can have too much even of a good thing. While recognizing that no two people in all the world are exactly alike—physically, mentally, spiritually, emotionally—can't we also see that there are likenesses in human beings? Just as the basic needs of food, clothing and shelter are necessary for the physical well-being of all and as sympathy, understanding, kindness, love and faith are the basic needs for the spiritual and emotional well-being, aren't there certain needs that are basic to intelligent individuals?

Isn't it possible for the school (society's organized institution for learning) to define certain goals that all of society's reasonably intelligent individuals can and should attain? In trying to gear the complicated educational machine to a thousand and one different speeds, never knowing quite when to shift into which, haven't we been inclined to lose sight of the fact that we do have a common destination? If we could just be sure of where we are going we might take different routes and move at different speeds but with real incentive for getting there we would certainly arrive, some time.

I should like to substitute for the already overworked term "interest" the word "desire." When one really wants something he will exert effort to get it and nothing worth while was ever accomplished, no heights attained, without the exertion of effort. Pioneers who have charted new paths have been workers, indefatigable workers. Are we today in our schools developing a generation of workers, workers with zeal and enthusiasm to overcome difficulties and accomplish worth-while objectives? Perhaps if we took some of our precious time to turn the spotlight of our own understanding of child nature on the inner child, we might find that spark within each one that generates effort and that will drive him to heights unmeasured by scientific instruments.

If we should really take time to know the child we might discover just how much he wants to be like his fellows—how humiliated and miserable he is when he is singled out as "different." If the ultimate goal of the state-supported school is the development of worthy citizens, isn't it possible to analyze and define the basic elements of worthy citizenship and to set as the goal of tax-supported institutions of learning those basic knowledges, habits and attitudes without which no individual can intelligently participate in a democratic society?

School Cannot Teach All Things

If we should make some attempt to limit the vitally necessary goals, set them within reach of the reasonably intelligent and help children to acquire the habit of mastery, we would be revealing to them the joy of accomplishment, the sense of satisfaction that accompanies a job well done. The school, as an instrument of the state, is not the place to teach all things or to accomplish the impossible. It is the place to learn a few things well and to develop a desire for knowledge and understanding, an urge never to stop learning, a drive to follow individual interests outside of school hours and through all of life.

Teaching and learning should be a joy and a pleasure, but if teaching is immersed in a maze of detail and learning is cluttered with attempts at the impossible, the whole process becomes a futile serving of time. Both teacher and pupil must have time to be people, people with a kindly interest in one another and a desire to do well whatever is done.

I am not advocating a return to mass instruction or to the memorization of subject matter; I am simply making a plea for common sense in dealing with children. Too many of the propagandists of the "new" and the "scientific" in education fail to temper their enthusiasm with reason.

(*Continued on page* 32)

Low Bid for Brains

EDWARD P. HAWES

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AS a director in a fourth class school district in Pennsylvania I have noticed that when coal is needed for the furnaces it is our custom, when the bids are all in and tabulated, to award the contract to the lowest bidder, unless there are cogent reasons against it.

As for the teachers, they, too, are hired and, until the teacher-tenure act was passed, have been fired on the basis of this same sterling business principle. If a teacher is getting from $2250 to $2500 a year in a third class district or from $1800 to $2000 in a fourth class district, such top amounts are usually viewed with alarm by a practical board and the incumbent of such a princely sinecure is urged with an insistence that cannot be denied to apply for the retirement pension at the "may" age of 62 rather than to prolong it to the "must" age of 70. Then a young teacher can be hired at $90 or $100 per month and a substantial saving is thus made for the school district.

Value of Experience Discounted

It frequently happens, however, that the teacher of 60 or over is at the zenith of his teaching power. In a profession that keeps one ever young in heart there are added to this youthful spirit judgment, tact and poise that have been developed and refined through years of experience. Such a teacher is of incalculable value to the community he serves and this value is expressed as an uplift to the mind and spirit. To the average school board, however, this is a highly impractical consideration. Board members must be practical and low bid for good value is good sense and good practice.

To be fair to the young teacher, these things can be said for him: He has come from some college or normal school that provides the most up-to-date and approved courses in teacher training. He has been put through a more thorough pedagogical combing to prepare him for his life's work than was ever thought of in the days when his predecessor was fitting himself for his job. There is also an aura of brightness and light about the young new teacher. He is unknown and untried and for that very reason there is all the piquancy of a new interest in his employment. The elder teacher is an old shoe, comfortable and still serviceable but—and there are many "buts," all of them more or less patronizing and unpleasant.

The elder teacher in most cases, if he has been a conscientious craftsman, kindly, capable and above the average in intelligence, will be greatly missed when he goes out via death, disablement or retirement pension. However, school board members with their eyes on the budget derive satisfaction from the reduced salary schedule. If the replacements, the bargain shoes, have a tendency to pinch or squeak a bit board members rarely learn of such discomfort because the supervising principal assures them at regular intervals that the high standards of the schools are being adequately maintained.

On the surface this sounds reasonable. To meet definite requirements the state department of education has evolved definite yardsticks to measure the scope of the work. In their turn the county superintendents have definite instructions contained in the state syllabus and these are transmitted in whole or in essential part to the many school heads in their jurisdiction. The syllabus gives practical suggestions for the subjects to be taught and the courses to be covered with a careful outlining of the work throughout the grades.

The thick volume of the "School Laws of Pennsylvania" serves as both a contractor's building trades' manual and an architect's plan for erecting the massive structure of the public school system of Pennsylvania. This modern laboratory of education is built on the most approved plans. It is officered and staffed by individuals who have met the exacting requirements prescribed by law. In this edifice one will see the latest and most up-to-date improvements in lighting, heating, sanitation, ventilation and all the gadgets and gears pertinent to such a plant. Thus, youth is provided with the proper equipment and environment to forge the tools for use in adult life.

That these tools do not come up to expectation is a grave concern to everyone who is interested in education. What is the trouble? Surely, it cannot be with the physical setup of the school system. That makes an imposing picture. Nor is it likely to be found in the organization. That has been evolved through many years of careful planning and experimentation. Is it possible that in this massive machine shop there is a dearth of skilled labor? If the fault lies in the selection of teachers there is little chance of remedy as long as the low-bid-for-brains policy prevails. Unfortunately, it is the exception rather than the rule when school board members suggest paying a higher price for better and more skilled workmen.

More "Vital" Considerations

There are so many other and apparently weightier considerations in hiring a teacher. Can he coach the football team, basketball team? What other sports is he qualified to promote and coach? Has he had any experience in scout work? Can he play a musical instrument? It is assumed that if he has his teacher's certificate issued by the state department and properly filed with the county superintendent he is fully able to meet all teaching requirements. As a safeguard against incompetency, he is under the supervision of his school principal or the yearly checkup by a representative from the county office.

Selection of good teachers presents many difficulties and frequently the very precautions devised to avoid incompetency add to rather than lessen the difficulty. I am thinking of a man who had had several years of successful commercial art work to his credit but had become discouraged at the loss of contracts owing to the business failures of the

times. He had made application for the position of art supervisor in a school district near his home. His educational history in art was impressive. He had taken all the art courses available at Carnegie Institute in Pittsburgh, had supplemented them by a year or so in the Students' Art League and in the National Academy in New York City. Added to these qualifications was a highly successful record in teaching private pupils. This man, however, could not be certified to teach art in a fourth class school district.

Another case is that of a music supervisor whom I had smuggled in via an emergency certificate. She was a woman who had had a distinguished musical career and a reputation for unusual success in choral work, as well as with private pupils. As I recall the incident, it seems I was given to understand that the granting of any certificate to her was a generous gesture on the part of the county office. At any rate, we had the advantage of her services for one year. In that short time she made such an imprint of capable teaching and enthusiastic directing that many more years will have to pass before it has been obliterated.

At the end of the year she was informed by the county authorities that in order to have her certificate renewed she must attend summer school, take such and such course and be credited with so many hours of work. When told where and under whom she was to take these courses she exclaimed, "Why, bless you, I know those men; I taught them all they know about music years ago."

Cases such as these have been duplicated, I have no doubt, many times over in other school systems. In the light of this policy one would be inclined to think that nothing must be done to disturb the comfortable mediocrity of the whole system. This does not check with the ringing declaration: "Only the best is good enough for our schools."

What of the teachers themselves, the good ones who not only have met all the paper requirements but also have the gift, the divine afflatus for teaching? Undoubtedly, they have in mind to satisfy their souls' craving and make their contribution to their chosen profession. If they must take positions in a third or fourth class district, it is disheartening to contemplate how minute their chances are of animating the great automaton of the public school.

The matter generally resolves itself into the struggle to keep one's own body and soul together. These teachers form a small minority group for, in general, a teacher with enough intelligence to qualify for such a position would have far too much to accept the conditions involved. For either he would have to renounce for himself the opportunity of living a fully rounded life with a wife and family or he would be continually tortured and distracted by seeing his dear ones struggling, with little hope of success, to maintain the common decencies of life.

Boys and girls attending school in the third and fourth class districts of Pennsylvania make up a large percentage of the total number of school children of the state. If these children are entitled to the advantages of a real education, some radical changes must be made in our school economy. Something more is needed than $100,000 plus consolidated school buildings, bus transportation and adequate physical equipment.

When these precious values of mind and spirit in teacher applicants are sought for and weighed with as much discrimination as are the school's physical properties and then are purchased with a satisfactory living wage, we may expect our schools to take the path of real educational advancement.

Reorganization Surveys in Illinois

DURING September, on the order of the Illinois General Assembly, school board members of approximately 12,000 school districts of the state met for the special purpose of electing county commissions to survey the multiplicity of school taxing bodies in the state and make recommendations for a general reorganization. There are 102 counties and 38,600 men and women serving on the school boards.

At these meetings all the board members of a given county were divided into two groups, *i.e.* urban and rural. The rural groups were given the privilege of electing three members to the county commission, while the urban groups were permitted to choose only two members.

These county survey commissions of five members, in cooperation with the county superintendent, will be responsible for making careful studies of the school districts in their given counties; for making maps of the existing situation and an ideal situation, and for making recommendations for reorganization to the local communities. The commissions will be given until the end of next year to complete their work.

There are more school districts in Illinois than there are in any other state. The ratio of assessed valuation per pupil enrolled varies widely in the different districts, some having 250 times as much as others. Self-support through local taxation covers 90 per cent of all costs. In many high school districts there is no support from the state whatsoever. The state now spends approximately $32,000,000 on public education during the biennium and there is constant pressure from the numerous legislative lobbies to increase this amount. At the same time, some of the local school districts are so independent that they hardly recognize the fact that they are part of county or state systems.

Some professional studies have already been made of peculiar situations in certain counties. In other situations there has been minor popular demand to meet the logic of greater units of assessment and administration. Much of the new effort will depend upon the type of leadership in the respective counties. Obviously, recourse should be had to such studies as have already been made unofficially. It is the often expressed hope of those who have led in sponsoring the present permissive legislation that a sufficient number of patterns for action will be established during the next year to impress the whole state with the necessity for and feasibility of meeting and solving the whole problem of reasonably equalized school support and opportunities.

Spend More to Teach More

Results of Rhode Island Survey

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IN A recent study of the schools in the state of Rhode Island an analysis was made to determine how accepted school practices are affected by the amount of the current expenditures. In this study the Mort-Cornell "Guide for Self-Appraisal of School Systems" was applied to 38 of the 39 school districts in the state. This guide describes 183 practices that have come into the schools, largely since 1900, and that were rather widely accepted as desirable by the better schools of the United States as early as 1930.

The schools were divided into low, middle and upper expenditure levels on the basis of expenditures per weighted elementary unit. A study was then made of the extent to which the items described in the guide had been introduced into the schools on the three expenditure levels.

Expenditures Affect 155 Items

Of the 183 items described in the guide 155 responded to increased expenditures. Only 28 of the 183 items did not appear to be related to expenditures. Items that did respond to expenditures dealt largely with the day-to-day activities of the pupils that enable the teacher to observe, redirect and improve the learning situation; that encourage pupil initiative and activity, and that use the school plant to its best advantage. Twenty-one of the 28 items that did not respond to expenditures dealt with school organization, the board of education, the provision of improved physical facilities in the school plants and the business management of the schools.

Low Expenditure Schools. The outstanding characteristic of the low expenditure schools in Rhode Island is their adherence to practices and procedures that were in vogue in schools at the opening of the present century. The teacher plans the work and executes her plans within a relatively narrow framework. The content of the work, the methods used and the results obtained are in terms of the teacher's opinions and show little relationship to pupil needs, aptitudes and capacities.

The textbook and the teacher are almost the only sources of information for the pupil. Little attempt is made to supplement these sources with everyday experiences drawn from the lives of the pupils. Field trips and excursions are rare and little nature study is in evidence. Music activities are at a minimum level.

Many of the basic principles that should underlie training for life in a democracy are neglected. Only in rare cases are pupils given opportunities for free self-expression through individual constructive work. Pupil governed and controlled activities are infrequent; vocational information and guidance are limited, and the preparation of pupils for vocations has hardly begun. The vocational work that is offered is noticeably inferior to that offered in schools having higher expenditures.

The chances are 8 to 1 that the low expenditure schools offer no organized physical and recreational programs. Periodical physical examinations are given in about half of the schools and medical and dental advice is available, but follow-up programs are rare.

Teachers' interests center around the teaching of textbook materials. In most of these schools creative work in the form of activity programs cannot be carried on because of lack of available space and an insufficient supply of materials. Records of pupil grades are kept but the personal records are incomplete. Pupil absence is generally not investigated by the teachers or by trained attendance officials and little conscious effort is made to determine and remove the causes for nonattendance.

The chances are 6 to 1 that the high schools on the low expenditure level concentrate on preparing pupils to enter college. This narrow concept of education does not recognize the right of every pupil to succeed except insofar as success is measured by this particular objective. These schools do not recognize the nature and extent of individual differences and do not vary their programs of work to make possible the highest attainment of which the pupils are capable.

As if in keeping with the inflexible school program, more than 80 per cent of the children attending these schools sit in rows of seats that are attached rigidly to the floor. They are not accorded the right of moving freely about the room to consult the limited supplementary materials.

Middle Expenditure Schools. Schools on the middle expenditure level differ from low expenditure schools in the degree to which services are rendered and in the spirit in which these services are rendered. The chances are about even that the schools are attempting to place education on an individual basis.

More Flexibility at Middle Level

The curriculum is relatively flexible. About a third of the schools permit pupils to move freely about the rooms to consult supplementary materials. Class instruction is organized on broader foundations and makes use of unit organization and activity methods. There is an increase in the use of special rooms for special subjects. Approximately one third of the schools organize trips and excursions to points of educational interest. More than half of them make use of pupil experiences in the teaching process. Individual differences are recognized. Assemblies directed by pupils are found in about half of these schools.

The chances are even that the teachers revise the courses of study periodically. There is some experimentation with teaching methods. Tests and measurements are used to assist in determining abilities. About 60 per cent of the schools in this group make attempts to interest pu-

pils in extracurricular activities and to record the significant findings in this field.

In approximately three cases out of five attempts are made to learn about the home backgrounds and to use this information in planning the program for the pupils. Attendance problems are investigated and corrected by trained attendance personnel. About one third of the schools offer pupil guidance programs. Academic requirements are less rigid.

In slightly more than half of the schools the health programs of the school and community are closely coordinated. The school interests itself in the removal of physical handicaps.

Upper Expenditure Schools. Schools on the upper expenditure level differ from schools on the middle level to approximately the same degree that the middle level schools differ from the low level schools. The chances are about 2 to 1 that the desirable adaptations are being made. A parent who sends his children to a school on the upper expenditure level in Rhode Island need have little doubt as to the efforts of the teachers to adapt the school to the needs of his children.

In these schools the curriculum is sufficiently flexible to provide for individual interests and abilities. Work is organized on the basis of broad subject matter and pupils are encouraged to use sources outside of the school to supplement the work. Group work is a recognized procedure. Special rooms are generally provided for special subjects. Pupils who have special talents are encouraged to develop them and to use them for the welfare of the group.

Teachers are more alert to the problems of individual differences and seek new materials and new methods to develop them. The courses of study are under constant revision. Teachers' meetings to consolidate and hold the gains and to diffuse them through the teaching staff are frequent.

The pupils are active in the pursuit of knowledge. Seating equipment is usually movable; supplementary materials are found in larger quantities, and pupils move about freely. Extracurricular activities are integral parts of the school program. The nature and variety of activities carried on clearly indicate them to be outgrowths of pupil interests.

What do these differences mean? The technics of the low expenditure schools result in the development of followers. The pupils are taught to follow. This is also true to a lesser degree of schools on the middle expenditure level although the pupils who are aggressive are given opportunities to exercise and develop some of their special traits.

Schools on the upper expenditure level tend to push the horizons of knowledge about the pupil into new ground, exploring here, experimenting there and consolidating the gains for use in other situations. The pupil is taught self-reliance, to gather and weigh evidence and to make decisions on the basis of facts. His special abilities are cultivated. He is taught the meaning and the ways of a democratic society.

The amount of the current school expenditures appears to be the most important single factor in producing these results.

Is Individualizing Overdone?

(*Continued from page* 28)

Human relationships cannot be reduced to an exact science. The application of scientific methods to education should not mechanize teaching technics. It should help teachers and pupils to a little surer footing in the climb to learning heights.

In spite of all that has been written about individual differences and individualization of instruction, there is too little clarified thinking, too little real understanding concerning it. Whose responsibility is it? Is individualization of instruction a matter of diversified curriculums? Is it a question of varying levels of achievement? Is it the kind of instruction given, the quality or the quantity? Or is it entirely the teacher's responsibility to know intimately and to direct individually the learning of each member of the class? In that case, how many individuals can one teacher know intimately and direct individually during a term?

The educational system continues to add to its already overcrowded curriculum; to introduce such catchwords and phrases as freedom, interest, life situations, activity, problem, individual differences, integration and unification, and to ask the teachers to keep detailed records and to inventory deficiencies in this and deficiencies in that, until teaching becomes a burden and teachers are so overwhelmed with detail that they have no time to live.

Let us analyze what we are trying to do and see whether or not it is possible. Let us determine some reasonable goals that are attainable by the majority and vitally necessary to intelligent living in modern society. Let us see to it that those goals are attained. Let us see that we all do some things well. Let us try to find in each child that spark that kindles desire to learn, the desire that will carry his learning far beyond the four walls of the school and beyond the years allotted to school life.

The task of determining reasonable goals that are attainable by the majority must be cooperative. Teachers, supervisors, administrators and parents must work with representatives of business and industry to determine, through a study of contemporary society, those essential learnings and understandings that an intelligent participant in modern American society should have. The next step is to study experimentally, in controlled situations, the possibilities and probabilities of attaining such goals with children of varying abilities and rates of development.

Through experimentation situations must be provided and technics developed that are designed to produce optimal results for the greatest number. Choices must be made, but choices made by each individual pupil or by each individual teacher from a welter of materials and an endless list of desirable objectives cannot be depended upon for either economy of learning or mastery of essentials.

We must critically evaluate our expanding curriculum, separate the vitally essential from the desirable and set as our first goal the mastery of the vitally essential. We have already spent too much time on an educational merry-go-round frantically clutching for the brass ring.

ART DEPARTMENTS

Art Values in LIFE

ALBERT CHRIST-JANER

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THE tortured minds of a few who have in them a high vision may be concerned because "there is no lack of ways and means of dividing and measuring these wretched days of ours, which we should try not to live in vain and squander without leaving any fame, any lasting memory of us in the minds of mortals." This was the driving fear of Leonardo da Vinci. And we may well be glad that such minds, with desperate ambitions, live today. We need not underestimate their creative power by spending our sympathy on them or by giving our time to encourage them. They have the inner power. They will carry on.

We teachers, however, know where our concern is needed. In the words of Robert Ulich, we know "that the sources of education are not to be found exclusively in these ideas of self-perpetuation, in the egoism of these few," even though this ego-spirit probably gives us the beautiful things of art, of music, of literature. We turn to our classes; we deal with the group and its individuals.

At Stephens College we have faced the problem of educating our students in the humanities for many years. About a thousand students each year work in the art studios and study the fundamental principles of esthetics that underlie the various areas of the arts—painting, music, drama, sculpture, literature, architecture. A staff of teachers has been busy trying to plot a course over which we can lead, direct or lure these students.

Let us now face exactly what has already been implied: Only a few will be professional creative artists; the many will be the "consumers." The first will, because of us or despite us, win out somehow and say what they will say; the others need us. In order to be of help we must have some kind of philosophy of, let us say, art instruction.

Not even a sketch of such philosophy will be found here. To develop a system of ideas about this matter requires good reading and steady thinking and the experiences of teaching. But, perhaps, we can crowd into this brief discussion the answers to an important question: What values can come to the student who studies art with the "consumer attitude"?

1. **A richer appreciation of the art objects.** To those of us who have taught large numbers of students who warn us at the start that they are not going to be artists, it is an incontestable fact that a person who has lined a plate with a needle has a deeper sense of appreciation for the graphic arts than the one who has learned only the history of prints. And no one, we have found, is more enthusiastic about the technical classes than is the artist himself, who is eager to have an audience of appreciators who know and not only "know about."

Serious technical work may lead one student to enrich his life with a satisfying hobby; another may become a discerning collector who adds to his store things that are of esthetic value and not of ephemeral fad-value. It may lead the third to buy fine pictures for the walls of his home, to bring to that home all the atmosphere that a house of people of good taste possesses.

2. **A functional sense of judgment about all objects.** An automobile designer complained one day when we were discussing the epidermal fussings that pass as design for function that the public can't take it! He said the great factories were ready, at almost any time, to follow Stout and to put a splendidly functional automobile upon the market. But, the designer concluded, it would mean financial ruin for the manufacturer who might dare to take this revolutionary step. The designer was not passing the buck; he was well informed upon the subject.

Have we teachers thought out our responsibility? We are, in a way, the directors of industry. For future markets will display the demands we create in the minds of the consumers! Homes, landscapes, dresses, furniture, wallpaper, pottery, silverware —and ships and sealingwax—will be improved in shape and in beauty, when the consumer has the taste to want better things. What ideas are we teachers helping to form in the minds of our students?

3. **A way of living that can add manifestly to happiness.** To quote Ulich again, "without being profoundly at home in himself, one cannot be at home in the objective world of being; and no one who was not more deeply in possession of himself than is the average citizen has ever created a work of universal value." Though it is not wise to add to such a sufficient statement, one is tempted for our purpose to say, "nor has he been able to appreciate such a work."

To be at home within yourself. This is a desirable state, it would seem, only if that home is resplendent with the best of things. A keener sensitivity, an exquisite discernment, is required to furnish that home. It ought to be that a serious study of art should develop that fine judgment. If it does then, certainly, this is the most vital of the three phases of our answer.

ART WAYS and WORK SPACE

E. LOUISE GUERNSEY

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A GROWING number of practical people envisage art ways as the inherent right of young and old. They encourage the use of paint, clay and other mediums in ways that lead to broad understandings of the uses of the materials. They are satisfied with simple childlike efforts. The emphasis is on the pleasurable experience, the joy in the doing. John's work is John's; Mary's is Mary's. The evaluation is left largely in the hands of the group. The standards and technics are those that acquire greater confidence in the use of the material.

Tendencies that direct childish efforts into defined patterns governed by principles of design and composition might better be left to secondary

Below, left: A print in the making. Below, right: Work space at the Crow Island School in Winnetka, Ill. Photograph from Hedrich-Blessing Studio, Chicago. Right: California's pupils learn art ways outdoors in the sunshine.

are inherent in the work in hand rather than those that might have been set up years before, having no relation to the present undertaking. Technics are stressed as experiences widen, when the individual senses need of greater skills.

With such an outlook children have time to play with materials, to "get the feel," ere any definite form may emerge. Absolute failures just do not occur for a child is helped to turn what might be termed a failure into some new idea and

schools and colleges, but they do not belong even there. Fantastic to a high degree and artificial from the standpoint of real living is the fact that too many children are now expected to evolve a masterpiece in twenty or thirty minutes once a week. From what source is the inspiration for such creation expected to come? What purpose does it serve? Do we as adults sit us down in large groups, pen in hand, and with one accord dash off a dissertation on democratic living?

How far have we come in the last fifty years? Exactly nowhere, but we are beginning to see signposts to point the way. We are inefficient perfectionists guarding the treasured standards of the past with steely eyes and narrowed lips. We are emotionally frozen. We are loath to shoulder the greater responsibility of suiting individual to material and material to individual. We fear the longer hours necessary for handling materials and the ways and means of the "cleaning up process."

It remains to be seen whether we have the stamina so to guard our thinking that no imposition of what we think children ought to do at this or that age level will mar the producing qualities of the Johns or the Marys. Supreme efforts must be made by energetic and overconscientious workers to "keep hands off." But the urge is often too strong. Methods are inevitably used to put "finish" on the work-a-day output of our smallest kindergartener in order that parents, the world, the co-workers may witness growth. We forget that the vital and lasting art ways are fluid, ever changing and fleeting.

Many children become disheartened and discouraged. They are actively repelled by too ardent assistance of friendly helpers who inadvertently make it impossible for a child to widen his own experience. Not only is this done by working on a child's work, but a thoughtless or unwise word or thought causes disaster. What a hollow world is left when a boy or girl looks up from a piece of work with eyes aglow, expecting sympathetic understanding and receives instead a blow—"Oh! I wouldn't do it that way" or "Let me show you how to do it."

How does one know how another should proceed in order to produce his own inner vision? If a teacher claims for herself the rôle of leader in these art ways, she should give consideration to the thought that we live in a rapidly changing world in which varied interests count most. She should realize the need for study and research that will lead her into fields of natural sciences, biology, physiology, anthropology and psychology.

If she is curious to know what has been written concerning the creativeness of children, she should by all means read "The Phenomena of Life" by Robert Crile, in order to know something of radio-electric theory. A better conception of what goes on within the body of a human being may then control the striving for the development of more abundant creative abilities.

A teacher who is interested in helping children develop art ways should become acquainted with building materials. She should plan and carry through concrete forms of structure, make contacts with forms of business and know something of household arts. She should "sit in" on many classes in order to know trends in other subject matter so that better understanding will enter into plans that may have originated in room situations. The room teacher, in turn, must spend some time in the work space learning the uses and smells of shellac, turpentine, denatured alcohol, banana oil, linseed oil and kerosene. She should mix paints for her own satisfaction, feel clay and work with children, knowing fully the best care to give all tools. One signpost points to encouraging spots that we choose to call work spaces. Here are large tins of clay of good consistency, kept so by the occasional aid of some child who likes to mix. Here are armatures,

FREEDOM OF SPEECH

Ten 8 year olds were modeling at a long table, each one working on a different idea. Jimmy worked a while on his dog and looked up to see what the others were making. "Who's head are you making, Jane?"

"I am going to make a head of Abraham Lincoln," said Jane.

"He's dead as a doornail," piped up Dick.

"Why, Dick, you mustn't talk like that; he was a very great man."

This statement was made by Jane in a hushed voice, almost wavering.

"I don't care if he was, he's dead as a doornail," reiterated Dick.

"Not many people have seen Abraham Lincoln," ventured someone else.

"I have, anyway I saw a picture of him at an art store," said Phoebe.

"I don't care if you did, he is dead as a doornail," insisted Dick.

Again, Jane's wavering voice tried to quiet the discussion by repeating that Abraham Lincoln was a very great man and people should not talk about him as Dick was doing.

At this point the counselor turned the interest into another channel in which more vital ideas, connected with Lincoln, prolonged the interchange of thought.

WORKING WITH OTHERS

"Oh! boy, but I'm glad to be back here working again. I learned my lesson all right. You know I might have done a lot of harm by throwing that clay at the tin. Some of it did go in someone's picture and I felt pretty bad. Some of the children thought I ought not to come to the work space for a long time. I have not been here for four weeks. I'll say, I learned my lesson. But I am going to make up for it, for I am going to work hard."

This outburst came from a fifth grader who had become a little careless but could take criticism.

Freedom of expression is the goal of these pupils who are learning

Reactions

JOY IN WORK

It was necessary to cut away some of the clay base of a half life-sized head Joan had made of a little girl with curls. She was particularly delighted with the curls for her own hair was straight. This head was her ideal. As the slice of clay fell away so that she grasped it firmly in both hands, she looked up and said, "Oh! I love this head, but especially this slice, for it is the very foundation of my work."

This gave evidence of the sincere regard for her work from the beginning—a sound and substantial start for a fifth grader in the simple use of a simple medium.

FREEDOM OF EXPRESSION

"I have an idea that I have wanted to work out for a long time. I would like to model a little figure of Peace. I wish her to look dignified."

Barbara had come into the work space by appointment to work a while before her group of fourth graders appeared. "Would you think that Peace would sit down or stand up?" she asked.

"What do you think would make others think of Peace as a dignified figure, for you said you wished her to have dignity?" replied the counselor.

"I believe I'll make her standing, but I am not sure whether I wish her to be knitting or holding a baby. I am going to model her two children, too, later. Courage and Loyalty. Courage is to be strong looking and stand close to his mother, Peace, and Loyalty —Loyalty, I am not sure about. I have to think about her for a longer time."

to model in clay. Photograph from the Board of Education, Chicago.

large and small, for building up figures and animals. A table holds cans of oil paints, powder paint and linseed oil. Here are stools of different heights, chairs and tables for spreading out work, easels for use if one wishes to stand.

Many materials are within easy reach of children of all ages, for oftentimes 6 year olds are working side by side with 12 year olds. The older ones express appreciation of what the younger ones are doing. The younger ones are fired with the determination to do more difficult pieces some time. A potter's wheel is built into one corner where boys and girls who are ready to work thoughtfully may assume care and responsibility in the use of clay where stronger and more skilled fingers and hands are required.

An informal, sympathetic atmosphere pervades this work space and childlike conversation is carried on, conversation that leads to natural discussion of ways and means, of bits of daily life, of trips and games. Not too much conversation, however, for an ever-growing desire to work quietly eliminates much unnecessary talk.

Here are a large can of plaster for molds, a roll of large wrapping paper for patterns and large drawings or paintings and burlap, muslin, oilcloth, felt, raffia, yarn, needles, thread, glue, shellac, turpentine, charcoal, chalk and pastels. A bale of old clean rags serves many purposes; powdered asbestos is used in place of papier-mâché; anything that really seems needed may be added.

Important is an easy access to wood shop and science laboratory where materials, information and help can be given by friendly counselors. If a strong armature is to be built, it is wiser to go to the shop where more tools are kept. If an experiment of making charcoal or plaster of paris is desired, then the science laboratory is better equipped for such work.

These work spaces become dynamic centers in which art ways of people, old and young, bear witness to growth in fundamental construction. Here, there are no restraining rules and the boundaries of work are only frontiers upon which all may whet their imaginations and curiosities for further undertakings. In these spaces the natural weaving together of all phases of doing may take the place of the more static procedure of highly planned and fixed curriculums. Arts and crafts as a separate department will tend to disappear and attempts to teach "art appreciation" will be no more. The numerous activities will be coalesced with no line of demarcation between them and the so-called three R's.

Are we not striving for freedom of expression, for confidence to carry through what we deem significant for daily living and for the assumption of right attitudes toward our work and our fellow workers? Sincere and real pleasure will come from the thing being done. Mistakes will be made but they can be discussed and out of them new phases of work will grow. Would it not indicate wisdom to begin to publish our mistakes, on which we build, rather than to write voluminously on ideals and patterns of thought which are never attained and on which we are unable to build?

On these pages are a few illustrations taken from work space situations in which freedom of speech, freedom of expression and ways of living and working with others grow slowly and surely.

As SCULPTURE Should Be Taught

BORIS BLAI

**Director, Stella Elkins Tyler School of Fine Arts
Temple University, Elkins Park, Pa.**

BEFORE starting any discussion of the teaching of sculpture in schools of secondary or any other level, it should be clearly understood that it is impossible to fix on any definite methods of teaching any of the arts if by the word "methods" is meant a rigid outline of just how to proceed. Each teacher is an individual with a personality of his own; his methods must suit his personality; they must be drawn from his own teaching experience.

Most art teaching is merely guiding the pupil in the right direction. He can be sent safely on his way by merely equipping him with a few fundamentals—a knowledge of form, a sharpened sense of observation and disciplined work habits. No complicated method of study is needed to achieve these aims if the teacher himself keeps them in mind.

The approach to the study of any creative endeavor is most important. Instructors should make it plain that no special talent is necessary. Anybody can learn. The most important essentials are time and patience.

We must not talk so much about "creative" art that the practical and craftsmanship angle is disregarded. The sculpture instructor can and should work with the other departments of the school. An application has recently come to my desk from a young man who has been earning money to take up the serious study of sculpture by modeling all sorts of objects for use in the visual education department of a large university. Requests come to him for plaster renderings of such oddly assorted articles as Egyptian sarcophagi and extinct animals. Not especially creative work, perhaps, but the craftsmanship and discipline can be called upon in the future. Without them, the tangible expression of any so-called creativity is impossible.

The sculpture instructor should welcome a request from the history department for a miniature of a Greek frieze and should not scorn the opportunity of modeling a human torso for the physiology class.

Secondary school pupils are mature enough to take on all the various branches of sculpture. Their experience should not be limited to squeezing out a head of the family dog in water clay. Let them become acquainted with the human form; give them the freedom of 18 or 24 inch armatures and. plastilina that does not frighten them into pickiness by the threat of hardening; let them hack away at wood and stone.

Young people of secondary school level are at the most difficult of all ages. They think that they are adults, are experiencing many adult emotions, but still have not yet pulled away from childhood. Modeling and, particularly, wood and stone carving offer physical activity for their restless, growing bodies. They offer mental activity for their groping, questioning minds—an outlet

The head of a Negro boy makes a striking subject for the enterprising sculptors in this class.

Secondary school pupils are sufficiently mature to be allowed to attempt all branches of sculpture.

for their many emotions stirred by the terrific experience of growing up. It is a situation in which the adolescent traits of curiosity, constructiveness, self-assertion, imitation and rivalry can be satisfied.

Only a few simple tools are needed for the beginning sculptor. Three chisels for wood carving and three for stone carving are adequate to carve a figure as large as would be expected of secondary school pupils. They should not be encouraged to try blocks larger than 12 by 18 by 8 inches but should be permitted to do so if they wish. On the larger stones, progress is less apparent and younger pupils tend to become discouraged. Granite should be avoided; but other stones, such as limestone, sandstone or marble, can be picked up easily.

Poplar, mahogany and walnut are the preferable woods and can all be obtained inexpensively. While the new materials are still unfamiliar to the pupil, 12 by 18 by 8 inch poplar board forms a happy medium between the drawing, which they have probably done, and the carving.

In answer to the inevitable complaint, "But I can't think of anything to carve," give them a piece of paper the same size as the wood block and show them how, by large sweeping strokes of the pencil, a pattern of large forms will emerge that can easily be organized into a composition to be transferred to the wood. It may be unnecessary to point the teacher to the conclusion that the relief should be the first project undertaken in wood carving and the last in plastilina and stone. For most wood carvings and all stone carving the pupils should be required to make complete drawings or, better yet, clay sketches of their subjects.

All the tools that are necessary for clay modeling are one's fingers. Pupils have to feel things; seeing and hearing are not enough. The first sculpture lesson should not be a lecture or a demonstration. The pupils should be given a piece of clay and told to form a block by using only their thumbs and index fingers. They should then roll the clay into balls with the palms of their hands and, finally, into sausages, using all the fingers. Thus, they will have all the basic forms, the block, circle and the straight line. These can then be combined to produce other, more complex forms that will have a solidity that is impossible to be gained from surface modeling.

How, art teachers will ask, can all this be done in a classroom? The answer is that it can't. Art is not a classroom subject and sculpture, particularly, since it deals with big forms, must be done in a studio or workshop where there is room to pull and push and hack and where the refuse is cleared after the work is completed, not when the bell rings. To ensure for the pupil the sense of accomplishment, he should be able to carry his piece through to the plaster cast and anyone who has ever cast in that medium knows what throwing wet plaster can do to a room.

In these mechanized times no child can learn the use of tools too early. The mastery of sculpture gives a skill with the hands that can be adapted to making a fountain piece or a telephone. Artists have thrown away their Bohemian tam o' shanters and come down out of the garret. The ivory tower exists no longer and the secondary school level is only six or eight years too late to learn this. It should be made clear in the kindergarten.

DRAWING Speaks for All

MARGUERITE MARQUART

Director of Art, Public Schools of Newark, N. J.

REVEALING stories of earliest man and his activities have been given us in a language that the simplest can understand. We find these stories in widely separated parts of the earth—on the walls of caves, set down on buffalo hides, on bits of stone—in a language that is common to us all. Drawing is that language. Its beginnings correspond to the beginnings of other languages and it has been developed just as these were, as the individual learned its use through observation, correction and practice.

Drawing is the most direct of all languages and is attempted by children in their early years as a means of self-expression and also by those in the childhood of the race. It demands much practice in learning to use it correctly and effectively and can be learned the same as any other language. It is the oldest known language, as well as the most widely useful when learned. Drawing tells more than words. Countless fields, educational and business, demand ability to draw or are greatly adorned thereby.

Its importance as a subject in the school curriculum is generally realized by administrators throughout the country, and the emphasis placed on its teaching in a given community is almost a measure of the enlightenment of those who direct the school system.

Drawing ability underlies all forms of graphic art. It is the part of the teacher to cultivate in pupils real power to draw. The first step is to teach children to see, to recognize form. Even at 4 years a child can begin training the eye to pick out the essentials of an object or scene, to find the lines that define it clearly and characterize it and to see the relation of the parts to one another—all this before putting anything down on paper.

A very young child says he is drawing a horse. His drawing may show no resemblance to a horse. At this point enters conversational guidance in teaching. The wise teacher asks him where is the tail, where the head, the legs; she directs his seeing, his looking for essentials; she focuses his observation and this, in turn, makes him correct his drawing. Gradually, his idea more and more takes form; he is getting to the place where he wants to make his drawing look like the object before him.

It is a tragedy in art education that too often the teacher herself cannot draw. Without possessing fundamental knowledge and skill and experience in her subject, she has her pupils do "creative" work without having schooled them in the fundamentals. The children are not taught to know forms through looking and looking at them, drawing them, having their drawings intelligently criticized, correcting them and drawing them over and over again. As a result, pupils do not know enough to do creative work that is worthy of the name. If, without such fundamental teaching, they have drawn something that approaches correctness in form, it is because they were copying another drawing, and that is not honest. In such a case, the teacher herself is not honest, thorough and scholarly.

The teacher must be equipped to lead the child to interpret with skill

Photograph from Board of Education, Chicago.

Working on a mural of the "Spirit of Chicago" for the library of Carl Schurz High School, Chicago.

Above: Art class in school at Jackson, Mich., sketching from a live model. Below: Learning to draw at the University of Iowa preschool laboratories.

and accuracy in two dimensions what he has seen in three dimensions. Her teaching must be based on her own awareness of the importance in a drawing of line, form, tone, color and texture and of the principles that underlie balance, rhythm and unity.

The teacher must know — and teach—that the basis of a good composition in drawing is organization, that there must be right balance of large areas and small areas, some big things and some small things, some bright colors and some dull colors, strong lines and weak lines, and that all this makes for rhythm and harmony.

The good art teacher, with accumulated knowledge and experience, is orderly in her procedure. She makes an outline for carrying on a course that is based on the fundamental of drawing from solids—cubes, cones, cylinders and spheres—so that the children will look and draw, draw and look, until they know the forms of these, the shadows, the texture and the lines.

This is, indeed, the way of all artists. It is amusing to read a paragraph from a letter of a painter who saw fine design possibilities in a flock of white Leghorn chickens, a notably foolish and flighty breed:

"I sat on my wobbly camp stool and muttered curses at the silly nervous creatures; as soon as I would fix my eye on one of them to draw its picture it would grow frantically self-conscious and either race off with shrill protests or tuck its head in the rear of itself somewhere; however, by persistence I finally got them in eye and mind, and now it makes a nice design."

Once the Leghorn in all its lines and motions, its lights and shadows, was deeply in the eye and mind of the artist, then there was organization of the picture for design (no Leghorn as a model would help in this!). Only then did the artist put on canvas the picture that came forth.

The cave drawings of prehistoric man are the result of endless observation. If he drew a deer, it was after daily watching the deer—close by, in the distance, lying down, jumping, drinking at the pool, leading its young. So when he drew a deer, the picture was a composite of all he knew about deer, and it was a good picture. So children must be taught observation above all. Most of them lack this ability, having had too great a quantity of everything thrust before them, with little attention paid to any one object or aspect;

Draw and Look

Only by drawing and drawing and drawing—with help from an intelligent critic — can pupils really master the fundamentals of form.

and the teacher must recognize and be prepared to cope with this fact.

Recently, the question was asked of several artists of high achievement what they considered most important in becoming an artist. Neysa McMein, distinguished magazine artist, exclaimed, "Only drawing, drawing, drawing—incessant drawing!" Lute Pease, nationally famous cartoonist, made the same reply. Now approaching 70, he draws constantly—at his desk, on the street car, on scraps of paper, on margins of newspapers. He draws everything, in every position, drawing it from life, from memory, in cartoon form or realistically. To that question Grant Wood replied, "The thing to do is to draw, draw, draw." The sketches of Rembrandt, da Vinci, Daumier, Goya, Picasso, Van Gogh, all the masters, done in black and white as preliminary studies, all show meticulous draughtsmanship and tell us how the artist first drew the figures that he later painted or developed in some other way.

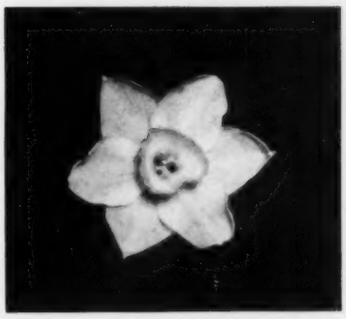
The same method must be used for school pupils; they need to draw continuously. One school period every day should be allotted to the drawing lesson, and this should include, on the teacher's part, daily work in directing the "seeing" of the pupils and the drawing of what they see. They must be led to decide the significant things about what they are to draw; they must see the relation of its part to each other; they must decide how the whole is to be placed on the paper. All this is "thinking through." It is then that the child's abandon and his naïveté have power and value and his work is truly creative in the right sense.

The importance of this training lies not only in making for skill in drawing but in its effect on the pupil's life, through preparation for accurate and complete observing, for organizing and for recognizing and creating balance not only in externals but in conduct and in life relationships. Adequate training in drawing leads into development of good taste, recognition of beauty and an instinctive cultivation of the feeling for harmony in everyday living. Training in drawing is recognized by educators as an influence in promoting progress in other branches of study and is especially valuable in helping to make clear problems in solid geometry.

No textbook on drawing no matter how specific the illustrations can take the place of solid objects as models from which to draw. Furthermore, the exciting thing is that it is possible for anyone who will practice to learn to draw, especially if there is competent instruction. Even the amateur who wishes to work through a course in drawing by himself can do so. One of the most stimulating things for such a one is to handle the materials and tools of drawing in order to get the "feel" of them.

Once essentials are mastered, knowledge of drawing leads into three avenues of expression: fine art, commercial art and art appreciation. A course in drawing is an essential preliminary to the study of color and design, including the use and technicalities of color and its psychology; it also is preparatory to the study of the different crafts and to the study of the history of art, including art in the home, in dress, painting and sculpture, and to art appreciation, which deals with the different schools of art and art influences.

Featuring PHOTOGRAPHY



JOHN BRAINERD MacHARG

Consultant in Visual Education, Lawrence College, Appleton, Wis.

A BIG subject, photography! Without philosophizing or trying to define "art" or "school," let us jump into the subject insofar as it concerns the largest group of artists, the children in our schools.

Art teachers know, and so do some parents, what is going on, but most of the men on the street and some of the women would be amazed to see the artistic work of children as shown in any good school exhibit. Many of the pictures seem quite as good and significant as some of the work of much-talked-about artists. The creative genius of children is often astounding.

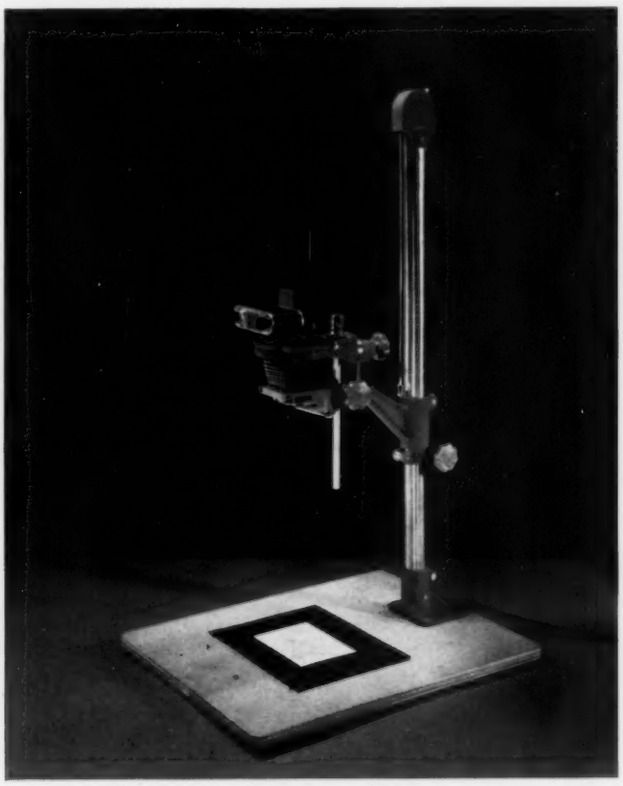
Since the fruits of that genius—the things that children paint or draw—can now be so easily reproduced in photographic color slides, it is too bad not to have an occasional screen showing of pictures. The competition and interest aroused well repay the trouble of making the slides. It is worth while going a long way to share the enthusiasm of parents and children in seeing the brilliant enlarged light reproduction of the work that schools nearly everywhere are doing. It really is not difficult to make color slides; almost any camera with a lens aperture of not less than f.5.6 that takes 35 mm. or bantam film can be used for general out-door photography; close-up copying becomes simple routine work with the proper apparatus, which is not unduly expensive. Color film is placed in the camera and, after exposure, is sent to the manufacturer for processing. Mounted slides ready for use are returned, this service being included in the original cost of the film.

From the standpoint of art, it is surprising how much both teachers and pupils can learn by simply looking into the ground glass or finder of a camera. So-called reflex cameras, some of which are both good and pleasingly inexpensive, give full sized and brilliant pictures through the finder that are marvelously effective in teaching composition. Set your camera on a tripod and let everybody have a look, indoors or out. An ample focusing cloth, conveniently and comfortably arranged to shut out extraneous light, is necessary for best results. To share the enthusiasm of children in viewing such pictures for the first time is richly rewarding.

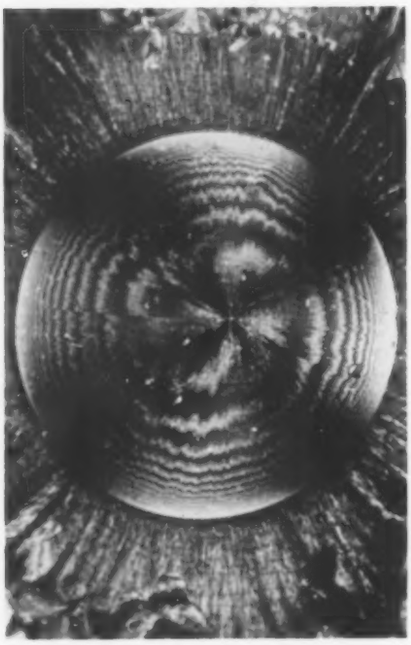
It is possible, too, with little outlay to rig up what we used to call a camera obscura. This is simply a lens and a mirror at the top of a tent that throws a color picture on the white top of a table within the enclosing walls, which may be of almost any kind of reasonably opaque black cloth. A No. 1 diopter lens, easily obtained, will yield a 2 foot picture.

Children love pictures and many

Studying composition with the aid of a reflex camera.



Copying device with adapter for ground glass focusing.



Suggestion for a conventional design: Asparagin crystals under polarized light (asparagus juice).

of them, especially in large cities, know all too little of the glories of America. Teachers are wont to make trips in the summer, and if they teach art and do not bring back plenty of slides, they miss one of the keen joys of life for both themselves and their pupils. It is almost as good from the art standpoint to sketch or paint from a color picture on the screen as it is to work outdoors, fighting flies, mosquitoes, rain and snow, not to mention struggling with continually changing clouds and light effects. Screen pictures can show almost every phase of life and stimulate creative activity. Some of the best and most famous artists of the land are following this technic.

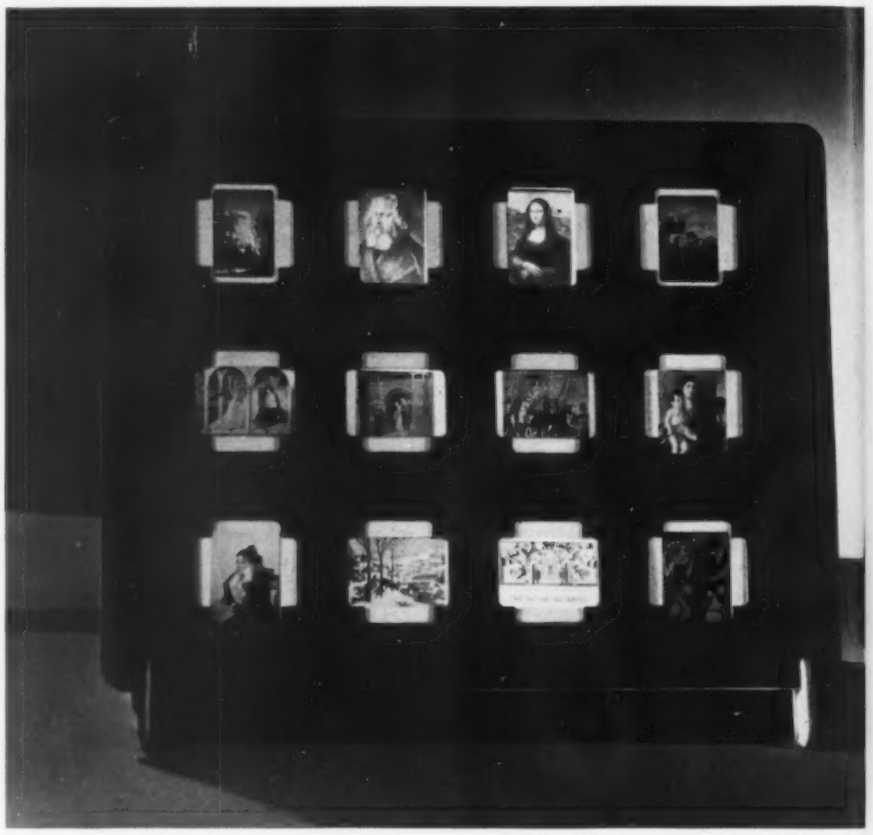
Of course, art instructors will teach photography, the magic art of direct painting with light and color. Simple as the making of photographs is, the serious student of art soon discovers that he needs all the knowledge of the artist, as well as the development of technical skill in using this medium. All the problems of composition and of color combinations must be considered and a new world of enjoyment and profit is revealed. Eyes become critical and look for what is significant and for the most effective grouping of subject matter. Colors that are often overlooked become evident and the problems of reflected light become a tangible interest.

Art teachers can become valuable helpers in the gentle art of visual education, for if they compare the principles of composition with the instructional qualities that are to be sought in good teaching pictures, they will find unexpected relationships. In the Trolinger score card for judging teaching pictures, only truthfulness is given a rating higher than the artistic element.

The colored slide is useful in mural painting. A long room with a blank wall at one end that can be painted white may become one of the most fascinating features of school work in art. Paintings are made with relative dimensions the same as those of the end of the room. These, copied as kodaslides and projected, show the mural decoration that is to be produced.

A similar technic can be used to provide the back-stage scene of dramatic productions. While projection, translucent screen and stage lighting introduce problems requiring some skill and ingenuity in their solution, they are not at all insurmountable.

One of the great advantages of the camera in art study is that it reveals what the unaided eye cannot see or sees only with difficulty, showing an infinite variety of exquisite things that are at once an inspiration and a help in conventional design. Photography of small objects, with or without a microscope, is not too difficult for amateurs. Small flowers, structural parts and cross-sections,



crystals under polarized light are just a few suggestions of what the science laboratories can contribute in slides that have all the breath-taking reality of accurate color.

The advent of 2 by 2 inch colored slides, at once inexpensive and faithful in color values, opens a new world of opportunity and pleasure. Pictures that normally are inaccessible or, at best, are available for brief study by a favored few can now be viewed more satisfactorily in home or school by screen projection than by study of the originals. It is a satisfaction, of course, to stand in the Sistine Chapel and to try to see, by craning one's neck or by the use of a mirror, those marvelous creations of Michelangelo in the dimly lighted arches above, but a colored slide that

costs but half a dollar will show in comfort what one would like to see in Rome.

Colored slides made from book illustrations or even from postal cards may seem as satisfactory, for teaching purposes at least, as those made at much greater expense from the originals. However slides are obtained, by purchase or individual production, building up a library for teaching and home study should be the aim of every teacher; so should a chairside projector that is ever ready for use. It is almost as important an adjunct of the living room as a radio receiver.

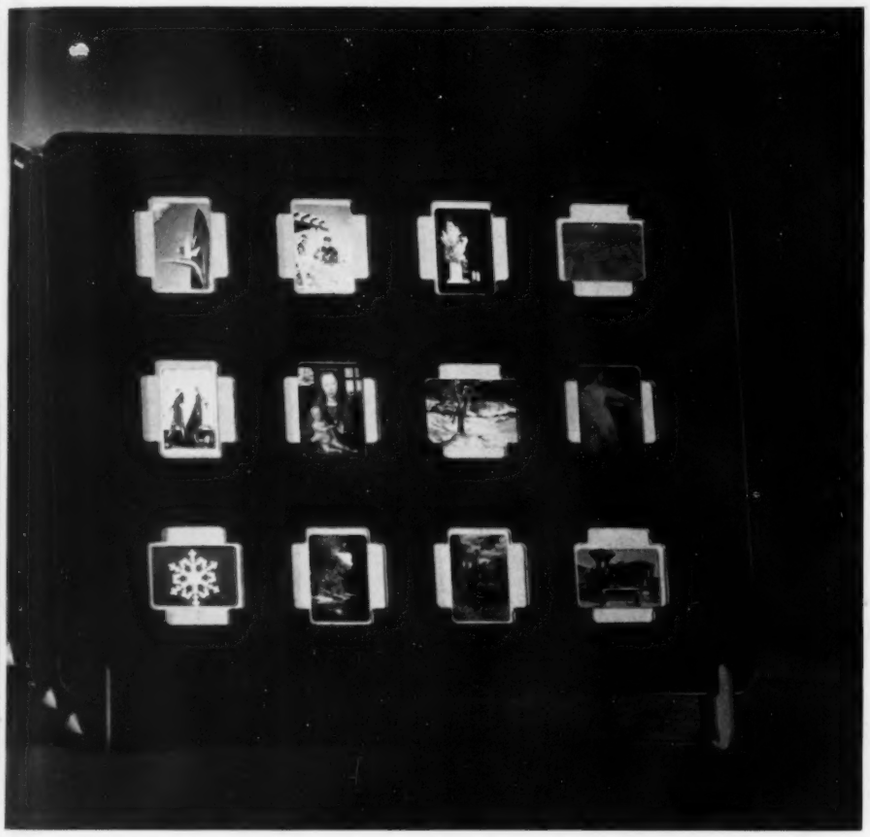


Exhibit panels for 2 by 2 inch color transparencies.

While both the large sized screen picture and the life sized picture are so important in art and in the use of teaching pictures in visual education that their use should never be minimized, the value of the schoolroom or studio display of the slides themselves should not be overlooked. This applies both to the teaching of the history of art and to semipermanent showing of pupil production.

Convenient display panels are available that serve also for filing slides in classified groups. With such panels to provide opal-glass support of the slides and electrical illumination behind or beneath them, exceedingly attractive and useful exhibits of 2 by 2 inch color transparencies can be made. If they are well lighted, they are not too small for satisfactory viewing with the unaided eye. A magnifying glass helps in detailed study. Many actual tests have proved that such displays constitute one of the most popular features of art exhibits.

Valuable as is the projection of a single picture on the screen, greater assistance and teaching efficiency are found in the showing of two pictures side by side for comparison. This, of course, requires two projectors. The different treatment of the same subject by various artists and the influence of one upon another become fascinating studies that can be linked with contemporary history to show how time and place affect artistic styles.

Two projectors make easily possible the three-dimensional projection that is already a feature of some studios and is not too far around the corner for experimental use. Three-dimensional pictures, perfectly projected, would unquestionably be more effective in teaching than flat pictures, especially in the study of sculpture. So far, the difficulties of projection and viewing have impeded their use and a general appreciation of their great value. They may eventually displace the use of living models.

Drawings in black and white are easily produced in slide form, and such production in its entirety may be a valuable project for the school camera club. An interesting experiment in viewing black and white slides is to study the effect of color upon them; this can be obtained by screens of different tints of cellophane, mounted between glass and held before the objective of the projector. The tinting by hand of black-and-white slides is not a high art, although in the hands of an expert colorist with modernistic trends, it may become an interesting medium. Hand-tinting does offer some outlet of expression for the untalented few, if such there be, who cannot express themselves in original art forms.

Black and white mass drawings and photographic silhouettes, both of which can easily be produced in slide form, are useful in teaching the elements of composition.

Just as soon as we try to make anything beautiful, whether it is a picture, a statue or a monkey wrench, we must try to discover what we, or somebody else, think is beautiful, or as we sometimes say, artistic. This has practical implications, for art has permeated manufacturing and business. Airplanes and motor cars may be more beautiful to more people than the most famous madonna. Advertising illustrations may be as important for art study as museums and galleries.

Art study in schools is one of the most important practical studies; perhaps, it is the most important from an educational and psychological standpoint. Expression in art forms often seems the most natural and easiest means of developing creative activity, and the urge that comes from the quest for truth and beauty may become an effective driving force in any field of the world's work.

Dexterity in Crafts

Ceramics: To make a thing oneself is the nearest way to understanding, says Paul Freigang, ceramic artist, Jamaica, N. Y. The form of a piece of pottery is of first importance. Subordinate to form is decoration, inasmuch as color, texture and glaze may improve or spoil a pot. The clay must be plastic for modeling and must have a good firing quality so that it will not lose its shape or crack when it is fired.

Metalcraft: This Mexican pupil in a Chicago school for the handicapped works in a delightful art environment on tin table decorations.

Puppetry: Junior high school pupils at Muncie, Ind., are skillful in the art of marionettes.

Stagecraft:

The Pied Piper lends itself to group enterprise in the making of sets and costumes in this Chicago school.

Art in the RURAL SCHOOL

MARGARET REA

Art Teacher
Beaverton Rural Agricultural School
Beaverton, Mich.

Top: The second graders are making "real" animals to put in their zoo. Center: The agriculture booth at the county fair was set up by the agriculture class under the art teacher's supervision. Bottom: Travel posters in the making.

THE Beaverton Rural Agricultural School, Beaverton, Mich., only recently added art to its curriculum. A teacher was engaged to teach two junior high school classes and to relieve the load of the grade principal by taking over the fifth grade for an hour each day. This left half a day free for art classes and made it possible for her to spend one hour a week in each grade room.

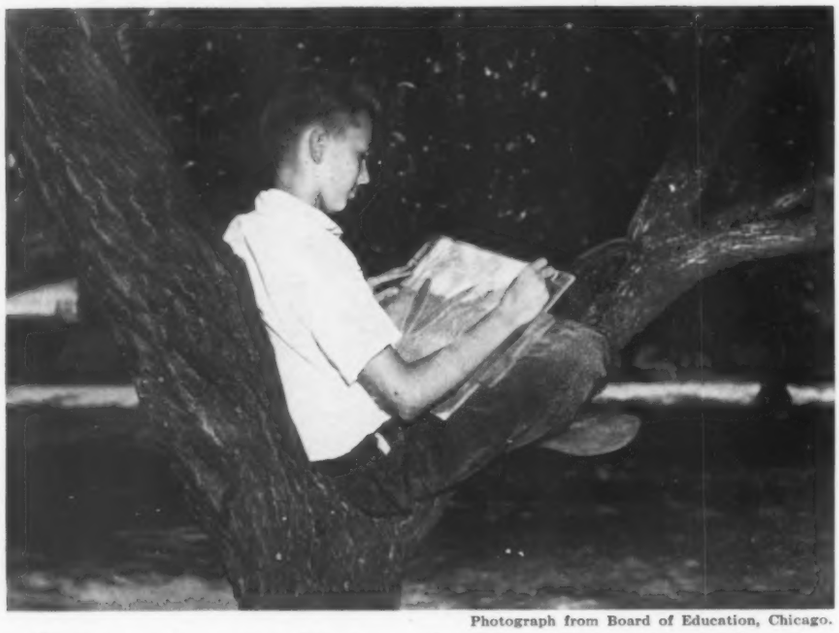
A class in art for homemaking was introduced in the high school. It met three times a week and enrolled 28 girls; the subject matter was correlated with whatever units the home economics classes were carrying out.

This was a beginning. The superintendent and grade principal were enthusiastic, the teachers were cooperative and the educational philosophy of the school was progressive. Four hundred elementary pupils were eagerly waiting to "take art."

What next? Was this splendid setup to degenerate into a routinized hour a week of drawing and coloring objects entirely divorced from the pupils' interests? Was it to become a struggle to pour into lively little minds the technical jargon of appreciation? The choice was definitely up to the art teacher.

At the first teachers' meeting she outlined her plan. Each teacher was to tell her, as far in advance as possible, the unit being carried out and the activities in which the children were interested. She was then at their command. The teachers were pleased. Requests came fast.

The first graders were making models of Mother Goose characters and were having trouble coloring the backgrounds for their display. Would the art teacher please help them? She did and the children learned a great deal about the technics of handling crayons and water colors. They learned it with ease and pleasure because it was something they needed to know for their project.



Photograph from Board of Education, Chicago.

It's fun to sit up in a big tree and interpret the world around you.

The second graders were building a zoo. Could they make "real" animals to put in their cages? Modeling in clay and papier-mâché followed as a matter of course.

In the fourth grade, journey geography was being introduced. The pupils wished to build in their sand table a scene from each country they "visited" and to make a travel poster about it. This involved construction activities, discussion of warm and cool colors and fundamentals of simple poster making.

The sixth grade pupils, as the result of a journey they had made, wished to make a mural painting. They had been reading the story of Ulysses and this was chosen as the topic for the murals. The drawing of the human figure was introduced and composition was again emphasized. The pupils were ready to study these things because preliminary sketches for the murals had shown a need for them.

Every effort was made to provide the child with opportunities for self-expression. Crayons and colored chalk were available to all and there were occasional periods of drawing "anything you wish," "games we play in winter" or illustrations of favorite poems. Care was taken, however, to see that the product was finished to the best of the pupil's ability.

The art program in the grades spread to the high school. Other classes began to see the need for assistance from the art teacher and her pupils. Patrons of the school and civic groups began to seek help with their art problems. There were so many demands of this kind that at the end of the first semester the art teacher was relieved of the two junior high classes.

The second year there was no question as to whether or not the art work should be continued. There has been one change, however. The art study in homemaking class has been discontinued and its place in the schedule is occupied by a free period for the art teacher. This places her "on call" at this time and any high school teachers or groups that have an art problem may avail themselves of her services.

This system has been found to be more efficient than limiting the work to one small class open only to girls as it makes it possible for each of the 250 high school pupils to have some contact with art work, thus reducing the per pupil cost. Art work is practically a full-time job.

A glance at the list of unusual projects that the art teacher and her classes have been called upon to carry out is proof enough that the art course can be of real service to the community. The following list was collected during eight years of teaching in two community schools. It does not include units of school work but only those things that constitute out-of-school services to organizations and individuals of the community:

Supervised construction and painting of scenery for 10 plays.

Painted mural in foyer of school building.

Designed program covers for community affairs.

Prepared P.-T.A. exhibit at county library display.

Painted style posters for beauty shop.

Painted advertising posters for practically all community activities.

Took complete charge of decorations for mother-daughter banquet for five consecutive years.

Assisted with junior-senior banquet decorations.

Lettered business signs on sides of three trucks.

Lettered two out-door signs and one window sign for places of business.

Assisted in decoration of boxes for box socials.

Helped select a trousseau.

Supervised layout of a school annual and pictorial supplement to the superintendent's report.

Designed monthly headings for community calendar.

Assisted agriculture class in arranging booth at county fair.

Assisted industrial arts group in painting small articles to be sold.

Conducted evening art classes for adults.

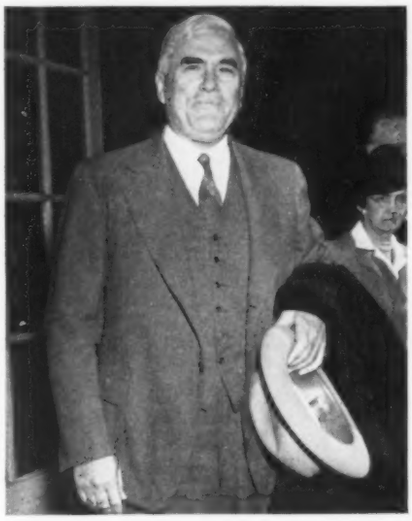
As the art teacher takes her place in the community, she will be called upon to perform many unusual services. She should be able to meet all these demands successfully and to draw anything from an elephant to a butterfly at a moment's notice. If she and her pupils can produce efficiently the signs, posters and other everyday manifestations of art that the community needs, she will win the respect of school patrons, will be called upon to decide their art problems and will have an opportunity to lead them gradually to an appreciation of better art.

As school patrons realize how many times they call upon the art teacher and how her subject functions in their everyday lives, her special field will be in as little danger of being dropped from the curriculum as are reading and writing.

No Time to Cut School Budgets, A. J. Stoddard Warns Business Officials

The American people, particularly the school children, should be taught to appreciate and to foster the American way of living.

This was the plea made by Dr. Alexander J. Stoddard, superintendent of schools, Philadelphia. "Maybe what we can do today will enable our country to continue to live on in the centuries to come," he stated, "but we must build a loyalty to a common purpose."



Dr. A. J. Stoddard of Philadelphia

In considering the rôle of the schools in the world conflict, Doctor Stoddard stressed three needs: adequate financing, defense measures and morale. He deplored the attitude of those who would cut school budgets. "If ever there was a generation that needed a strong educational system it is the boys and girls of today," he declared. "When you cut the budget 10 per cent you may imperil the whole 90 per cent. You don't merely eliminate the frills; you take out the heart. Far more logical is it to raise the budgets of social services during periods of stress and to lower them during good times."

By November 1 a program of precautions for American school children in air raids will be forthcoming from Washington, according to Doctor Stoddard. In this connection he warned against too much complacency and the feeling that it can't happen here. "Let us be forewarned," he urged. "This is not the time to be overcautious in being cautious."

Priority Rating Is Principal Plea of Business Officials at Meeting

Beside the important issue of priority rating, all other problems attendant upon the business management of schools faded into insignificance at the thirtieth annual convention of the National Association of Public School Business Officials held in Atlantic City. President John T. Cate in his opening address stressed the importance of all educational organizations joining together to obtain favorable action on the matter from the Office of Production Management.

Before the week was over the association passed a resolution to the effect that "in the development of all present and contemplated plans for priority or rationing of essential materials high priority be given to the needs of the public schools as well as to the military and naval establishments so that they may continue to function as a vital factor in the defense effort and in the preservation and improvement of the institutions so essential to the continuance of the American way of life."

As was to be expected, attendance at Atlantic City was good, fully up to, if not exceeding, any previous registration. School officials traveled from all sections of the country to listen to and participate in the excellent programs presented. Major attention was directed to the immediate challenges with which the schools of the country are faced and the preparations necessary for the new demands during the postwar era. Some idea of what these demands may be were revealed by Doctor Stoddard and other speakers who urged increasing attention to building the mental and physical health of the people, with particular attention to nutrition, clothing and housing.

The president for the coming year is H. S. Mitchell, Dearborn, Mich. Edwin F. Nelson, Hartford, Conn., formerly a director, becomes vice president, and Robert W. Shafer, Cincinnati, fills the post left vacant on the directorate through the resignation of L. D. Shuter. C. Harvey Fuller, Toronto, Canada, completes the new list of directors. Albert Austermuhl continues as treasurer and H. W. Cramblet, as secretary.

The 1942 convention will be held in Cleveland.

Asks Business Officials to Throw Themselves Into National Defense Activities

The job of the public school business official fits not insignificantly into the total picture of defense, John T. Cate of Glendale, Calif., told the convention in his presidential address.

"All you have to do is just cluck to a thoroughbred and he will give you every ounce of nerve, blood and heart that he has. You can cluck to a donkey and he will just kick. Never before has there been such a challenge to every person in public service to reveal his thoroughbred characteristics and to fulfill his responsibilities efficiently."

Mr. Cate called upon the association to make itself felt in the matter of procurement and priorities, in getting reductions in fire insurance premiums, in providing retirement plans for the noncertificated personnel, in backing helpful legislative measures, in promoting state organizations, in developing a central agency for testing of materials and equipment and in making a true profession of the work of school business administration.

Higher Culture Level, More Business, Sutton Tells Critics

His technic of winning business men to support education was entertainingly and convincingly revealed by Willis A. Sutton, superintendent of schools, Atlanta, Ga. Said Superintendent Sutton:

"In my own state we have 1,100,000 Negroes. If I had the power in this hand to wave a wand and to raise the educational level of those 1,100,000 Negroes from an average fourth grade to an average eighth grade, I would be willing to post a bond that I would double the business of Georgia.

"Here is a whole field of business finding fault with us about home economics, music and art. America spends more for art than for anything else in the world, unless it is bread and meat. There is art in the tie, in the suit of clothes, in the shape of the automobile, in bric-a-brac, in the shrubbery and the landscape, in jewelry, in the implements with which we eat, in the things we set on the table and in the tablecloth itself. Yet business says to us, 'We can't afford to give children art and music and the things that make life rich.' They are the basis of business."

Host and Officers: Harry Young, H. W. Cramblet, J. T. Cate, F. R. Flower and Albert Austermuhl

Early arrivals at the registration desk at Ambassador Hotel; the attendance was large

Here Are the School Lawyer's Three R's, as Cited by McKesson

To school lawyers, today's three R's are Responsibility, Resistance and Recovery, according to William B. McKesson, deputy counsel of Los Angeles County, California.

California is in the forefront in the matter of holding school districts liable for injuries to persons and property. Mr. McKesson cited 47 cases in his discussion of the liability of the district or its officers and employes for deaths and injuries in building or on grounds.

Summing up Los Angeles County's adjudicated cases, Mr. McKesson enunciated the following principles:

1. The statutes of California do not make the district the insurer of pupils but make it responsible for ordinary care.
2. Districts are not liable for injuries resulting from the acts of fellow pupils.
3. In determining the question of contributory negligence, it is proper for the jury to take into consideration the age and inexperience of the injured child.
4. Notice of defective or dangerous condition of school property may be either actual or constructive.
5. There is no personal liability on the part of the members of the governing board although a teacher is personally liable if his negligence causes the injury.

In the amount of compensation awarded for injuries judgments returned in decisions that have reached the appellate courts have ranged from $1000 for an injured arm to $16,000 for the loss of an eye.

Appeal to Patriotism of "Child Saboteurs"

"Sabotage" is the word that may be applied to the destruction of school property by vandals during the defense period.

By stressing patriotism in this campaign against unwarranted waste, Harold D. Hynds, superintendent of plant operation and maintenance of the public schools of New York City, thinks great progress can be made at this time.

In a tough Brooklyn neighborhood where live members of Murder Incorporated is the largest school playground in New York City. No window is broken, no walls are defaced, no books or money is stolen, Mr. Hynds reported.

The principal of the school attributes much of this good record to the fact that the custodian plays ball with the children after school, instructs them in athletic rules and maintains a shower for them in the summer. The children's interest in their class gardens, heightened through nature certificates and annual flower shows, helps.

"The monetary savings that school people can effect by reducing or eliminating vandalism is comparatively insignificant when placed beside the more permanent contribution that they can make by leaving with these boys and girls a respect for property, whether their own or others', and a feeling of pride in the condition and appearance of the buildings that are furnished them and their families for the public benefit," Mr. Hynds declared.

Ingenuity and imagination are required to put over a school program for the protection of public property and the teacher must be able to depend upon the cooperation of the custodian and the parents. Some of the steps taken by Justice Stephen S. Jackson of the Children's Court in his campaign to stamp out the causes of vandalism in New York City, which results in an expenditure of around $161,000 a year, were described by Mr. Hynds.

Conducts Cooperative Training Plan for Clerical Positions

A cooperative training program for clerical and secretarial positions in the school system has been in use in Oakland, Calif., for a number of years. John W. Edgemond, secretary and auditor of the Oakland board of education, described the system to the N.A.P.S.B.O. delegates.

Some 300 pupils a year get experience in an office situation three hours a day for either a semester or a year. The minimum hourly wage paid them is 25 cents; meantime they are continuing their schooling.

In the Oakland high schools selections of clerks are made from among the senior pupils by heads of the commercial departments; in some cases a preliminary examination is given.

In the Merritt Business School, a special commercial school for high school graduates, which is a part of the school system, the student clerk positions are treated as scholarships open only to students who qualify through competitive examination. Personality ratings are also taken into account.

The best qualified clerks are assigned to the elementary schools, where they act as secretary to the principal.

A. A. Knoll Stresses Safety Factors in Construction, Equipment and Grounds

While putting major emphasis on types of construction, care in heating and electrical installations and arrangement of the buildings on the site to reduce the fire hazard, Arthur A. Knoll, business manager of the city schools of Long Beach, Calif., also made the following points on safety.

1. Every school building of four or more classrooms should be equipped with an electric fire alarm system. If finances permit, the school alarm system should be connected with the city system.

2. Every school building should be so laid out that it may be emptied in three minutes.

3. Steps and stairways should be regular throughout the flight; hand rails should be provided at the side of each stairway exceeding 44 inches in width; central rails, in case the stairway exceeds 7 feet in width.

4. Exterior doors should be provided with strong door checks and wire glass. Interior doors should have hardware permitting their being opened from the classroom side without the use of a key.

5. Lockers, bookcases and cabinets should be anchored to the construction against earthquake hazard.

6. Concrete in showers and other places should be finished with a rough surface to prevent slippage.

7. Porcelain handles should not be used on faucets and water closets.

8. Vacuum breakers should be installed on all water closets to prevent back siphonage.

9. Gas pressure regulators should be installed ahead of any gas burning devices.

10. Windows on the playground side should be covered with wire mesh guards.

11. Rotating equipment in shops should have disconnect switches at the machines. Industrial arts equipment should be located so the operator faces either a blank wall or opaque window.

12. The grade of school grounds should not exceed 3 per cent.

13. Playground areas facing upon streets should be enclosed with a fence 6 feet or more high.

14. It is well to eliminate teeter-totters and large sized slides lest the small children be injured.

15. Sidewalks should not be troweled smooth but floated to a rough finish.

16. The lower 7 feet of incinerators should be of concrete or other masonry and not of steel or other materials that transmit heat readily.

Furniture Specifications in Work

Two specifications for school furniture have been prepared under the research associateship established at the National Bureau of Standards, Washington, D. C., Hugh B. Johnson reported to the convention.

One specification is for folding chairs and the other is for chair desks. A third specification for the U-frame or universal desk is being prepared at this time. These specifications are not entirely functional but are written in terms of school needs as far as it seemed practical to do so, Mr. Johnson asserted. The specifications will be given wide distribution.

Stack Tells How to Reduce Accidents in School District

Five recommendations for accident prevention were made by Herbert J. Stack, director of the Center for Safety Education, New York University. They are:

1. A complete accident reporting and follow-up system for the district, such as the Cleveland plan.

2. Investigation of school building accidents and institution of remedial measures.

3. A safety committee of the board of education with the business manager as secretary.

4. A general child education committee as a part of the community safety program with the school business manager as a member.

5. An athletic protection plan for taking care of injured athletes, such as is now in use in some 20 states.

Exhibitors' Show Has Touch of Magic

There's magic in modern invention, as those who passed back and forth among the sixty some exhibits in the Ambassador readily agreed. It was one of the best shows the exhibitors have yet staged for members of N.A.P.S.B.O.; it was not too large to eliminate the personal touch, which has contributed so greatly to these gatherings, but of sufficiently sizable proportions to form a comprehensive idea of what's new in school equipment.

But what about all this magic? For those who were unable to be present to believe their own eyes, we might mention first a drawing ink that dries the minute the brush point touches the paper. No need to hesitate before rubbing your hand over the surface. It won't blur or smudge. It's there to stay. In fact, sheets covered with the indelible black strokes had been standing for several hours in a glass of water. The paper discolored the water slightly but not the ink. This magic fluid comes in several colors.

Elliott Spratt, Exhibitors' Chairman

Writing boards of glass are two-faced, which means that they're doubly useful. If for one reason or other green doesn't fit into the color scheme or the pupils are not in the mood for it, just turn it over. Presto! it becomes ivory.

If there is some suspicion about leaks in the school lunchroom, if receipts are not what they should be, a tray checker will prove a miracle worker. It performs all manner of unsuspected tricks, such as issuing receipts with accurate control; moreover, it can be used as an adding machine.

These are to mention only a few of the magic wonders revealed. For seasonal atmosphere—other reasons, too—there were footballs and volleyballs. Maintenance problems proved to be no problems at all—with the right equipment. And why suffer headaches over the new budget, when a new system of records and machines for maintaining it might present better figures in a more favorable light.

By day the exhibitors entertained in their booths; after hours they entertained, almost everywhere, starting with their annual buffet supper on the opening day and continuing through until the last nail was removed from the decorative panels and the displays were packed away in their shipping cases. They provided entertainment and education liberally for all.

Two Canadian Board Members: Loftus H. Reid, Toronto; E. W. Morris, Windsor

Meet William Collins, director of purchases of the Detroit public schools

New Vice President Nelson and New President Mitchell shake hands heartily

Fox Tells How to Plan Approach, Play and Service Areas of Grounds

Ernest O. Fox's splendid paper on the development of public school grounds emphasized the utilitarian rather than the esthetic point of view.

Approach areas need to be well studied, well graded and properly planted, Mr. Fox declared. Shrubbery plantings need not be extensive and should not be of a type requiring excessive maintenance.

For the approach area, nothing can be of more benefit than a good job of housekeeping. If the area is littered with rubbish, if the lawns are not neatly and uniformly cut, if trimming is carelessly done or not done at all, the entire effect is either neutral or negative, in his opinion.

Play areas should be immediately adjacent to the building—in the rear or at the side. Every playground should be surrounded by a fence 6 or 7 feet high, preferably of the chain link, diamond mesh type. Playground gates or exits should be so planned as to force children to slow down before emerging onto the public sidewalk or street.

For an elementary school of 1000 pupils, a playground is satisfactory that furnishes 60 to 70 square feet per pupil. Additional area can be used to advantage.

For high school and junior high school activities, it is desirable to have the play area of grass. For elementary school playgrounds the choice of artificial surface will have to depend upon the amount of money on hand and the availability of the materials. The surface should be compact, resilient, well drained, free from dust and not unduly destructive of children's shoes and clothing.

Close supervision must be maintained over playground equipment because many accidents occur from its abuse. However, few accidents occur from the proper use of playground equipment.

Special areas for kindergarten children and school gardens for science classes and school garden groups were also stressed by Mr. Fox.

Service areas and parking grounds should be fenced off or so located that it is impossible for any vehicles to be driven upon the playgrounds or sidewalks used by the children.

All public utility lines should be taken to the building through underground conduits which, when once installed, are there for all time.

Mr. Fox is divisional director of the department of buildings and grounds, Detroit board of education.

Joslin Says Self-Sufficiency of Nation Due to Chemical Research

The United States, thanks to the chemical revolution that has taken place here since the World War, has the highest degree of self-sufficiency enjoyed by any country under the sun, asserted Theodore G. Joslin, director of the public relations department of the Du Pont Company, at the closing session of the convention.

Nitrogen, camphor, synthetic silk, synthetic rubber, dyes, potash, optical glass and urea are some of the necessities for war and peace that have been developed in this country since 1918 by an army of 70,000 research workers in 3500 industrial laboratories, Mr. Joslin pointed out.

Of these accomplishments the greatest to the welfare of the nation is the fixation of nitrogen, which makes America virtually independent of a foreign nitrate monopoly. It is next to impossible to find any phase of modern life that is not touched in an important way by the nitrogen that the chemist now takes from the air, the Du Pont representative said.

Harry Howell Tells Los Angeles' Job of Interpreting Budget

School systems should not make the mistake of engaging in public relations only at budget periods or at times of financial stress, Harry M. Howell, assistant superintendent in charge of budget of the Los Angeles city schools, was careful to tell his convention audience.

Mr. Howell described the budget brochure sent by the Los Angeles schools to 2000 local groups representing more than 500,000 persons and illustrated by slides how the schools' financial affairs are made understandable to the public.

In addition to this budget brochure Los Angeles also publishes a pocket sized "Financial Data" booklet.

By wide distribution of the budget brochure and by extensive newspaper publicity in advance of the public hearing on the school budget, the taxpayer has an opportunity to become well informed about the expenditure program.

Farinsod Asks Price Ceiling

Price problems of the present emergency deserve the careful study of every school man. Merle Farinsod, associate price executive, Office of Price Administration and Civilian Supply, Washington, D. C., emphasized this point and proceeded to explain that the prevention of inflation that would result in severe handicaps to public school and other public agencies can be prevented or at least modified through the cooperation of business, agriculture and public agencies with the President in rapidly evolving a program of price control. The cost of living has already risen 7½ per cent and wholesale prices have jumped 18 per cent. Public budgets will inevitably be affected by this change, he believes. However, this spiral may still be stopped short of the danger point by the administration of price control laws now before Congress.

Arthur Chenoweth of Atlantic City extends greetings to President J. T. Cate

From Cincinnati come both Robert W. Shafer and William Mietenkoetler

John W. Lewis of Baltimore smiles down on Harry Young of Atlantic City

McCunn Would Cover All Liability Exposures Under a Single Policy

An insurance program for schools should be based on the following principles, according to Drummond J. McCunn, assistant superintendent of schools, Pasadena, Calif.:

1. The broadest possible policy forms.
2. Automatic and blanket application of insurance to additional and changed exposures.
3. Unquestioned stability and fair claim policy of the insurance carrier.
4. A well-established and functioning safety program.

Principles 1 and 2 can be accomplished by purchasing a comprehensive public liability and property damage policy which is automatic and blanket-like in scope for all exposures that arise out of or relate to the operation of schools. Purchased under one policy in one company the net cost is lower.

The third principle should not be difficult to accomplish as there are many ways of determining the stability and claim paying policy of insurance carriers.

The fourth principle can best be accomplished by selecting a qualified person to establish a safety program. Many school districts have had much success in establishing a safety program as a function of the child welfare department.

Norton: What Form Federal Aid?

"Recent tendencies squarely pose the question as to whether the federal government shall set up federally controlled and federally administered educational enterprises along the pattern of the N.Y.A. and C.C.C.," said John K. Norton, professor of education, Teachers College, speaking on the question of building a financial structure for an adequate program of public education, "or whether federal financial aid shall operate through existing state and local school systems according to the patterns of the land-grant colleges and federally aided vocational work stemming from the Smith-Hughes Act." This question he described as perhaps the most important current issue affecting the administrative and financial organization of education. "Its educational and social implications," he added, "deserve the attention of all educational leaders and citizens."

McCool Describes Successful Centralized Purchasing Plan

How the Los Angeles County purchasing and stores department buys for 101 school districts, at a savings over previous decentralized prices of 33 1/3 per cent, was told the convention by J. M. McCool, assistant purchasing agent.

Only 75 of the 3072 counties in the United States have some type of centralized purchasing and only 200 of the thousands of cities, Mr. McCool declared.

The Los Angeles County districts served cover an area of 4085 square miles from mountain tops to desert to ocean so that deliveries are not easy.

The purchase order, covering the initial deliveries to the schools, is reproduced with the name of the vendor, a complete description of the items, including full specifications, all prices and discounts and terms of the agreement. A copy of this purchase order is forwarded to the district where are filled in the address and the date on which supplies are to be delivered and the quantity wanted of each item, together with the signature of the individual authorized to sign for the district. The order has already been signed by the purchasing agent of the county. The district then mails the order to the vendor.

To provide against emergencies, blank purchase orders also are issued to the districts, presigned by the purchasing agent. No items not on the standard list can be added to such agreement purchase orders.

Nibecker Tells How to Appraise Building and Equipment for Insurance

How does one go about appraising a building for insurance purposes?

A. S. Nibecker Jr., architect and business manager of the Los Angeles city school districts, gave sound advice on this subject at the N.A.P.S.B.O. convention.

The most practical method of arriving at the cost of a structure, and the one most widely used, is the square or cubic foot method, Mr. Nibecker declared.

Determining the floor area in square feet or the volume in cubic feet and multiplying either by an appropriate cost factor gives a reliable building value. These measurements, however, are useful only in the hands of those who thoroughly understand their limitations, Mr. Nibecker warned.

Buildings having the same volume or floor area may have entirely different shapes with more or less exterior walls, partitions and roof areas. The quality of materials and workmanship may vary.

To avoid mistakes, it is usually wise to obtain a cost per square foot or per cubic foot from two reliable sources, such as an architect and contractor or an engineer and contractor. Any wide variation will indicate the need for further investigation.

The ideal system of arriving at the value of the contents of the building is through a perpetual inventory with periodic adjustments for fluctuations.

Wants Protective Plan for Athletes

That school systems should establish some sort of protective plan for boy athletes injured in accidents is the belief of F. R. Wegner, superintendent of schools, Roslyn Heights, N. Y. An increasing number of states are providing certain remedial measures when boys are thus injured, he pointed out.

Moehlman Gives National Picture of Retirement Plans for Noncertificated

"The old attitude of academic snobbery in regard to noncertificated employes is weakening but has not been destroyed—far from it.

"While a few local and state education associations have actually put their shoulders to the wheel in securing retirement allowances for this group, the strongest efforts have been made by labor unions and by unions or independent associations of noncertificated personnel."

So declared Dr. Arthur B. Moehlman, professor of school administration and supervision, University of Michigan, and editor of The NATION'S SCHOOLS, at the convention.

Retirement allowances for noncertificated personnel are now provided comprehensively in nine states and the District of Columbia, according to Doctor Moehlman; six other states have some form of local plan administered locally or under the general supervision of a state agency.

Those states now operating state or local systems favor a continuation of state control, while the consensus in nonretirement plan states favors inclusion of this group under the federal Social Security Act.

The one advantage of the local systems is that they permit the more progressive urban systems to provide tenure and retirement without waiting for application of the idea to an entire state. The disadvantages are that the area of administration is too small to provide sound actuarial practice and that individuals are restricted to employment within a single district.

The state retirement system offers a wider base for operations and permits workers to take jobs in different parts of the state without losing their annuity rights. It is probably easier to maintain an actuarially sound system on a state than on an urban basis. Administrative experience, too, has been more favorable on a state than it has on a local basis.

The enactment of the federal Social Security Act has created a third choice, transcending state lines. It requires a joint contribution by board of education and the employe. The insured cannot be excluded from benefits.

Professional opposition to the proposed Wagner-McCormack amendment to the Social Security Act may be summed up as the low ceiling of individual benefits under the federal law. When applied to the noncertificated personnel, this low ceiling is not so significant and those states without provisions for either teacher or noncertificated personnel retirement plans are strongly in favor of inclusion within the federal pattern, Doctor Moehlman concluded.

Clifford Cites Advantages of Separate Retirement Funds

Forced to admit at the outset that the opposing view had more weight in its favor, J. M. Clifford, secretary of the Michigan Teachers' Retirement Fund Board, outlined the advantages in maintaining separate funds for certificated and noncertificated personnel.

The principal advantage of a separate fund lies in the fact that it reassures teachers by permitting their established retirement system to continue to function in its original manner. Too, annuity costs for the nonteaching as compared with the teaching personnel can be accurately figured. Separate funds also permit taking into account the differences that exist with regard to age, service and salary. They permit different retirement provisions designed to accommodate the group covered.

There is a decided advantage, Mr. Clifford points out, in having both funds administered by one board.

Calls Retirement Plan Best That Serves All Employes

The advantages of combining all school employes in a single retirement plan, as is done in Pennsylvania, were told by H. H. Baish, secretary of the Pennsylvania Public School Employes' Retirement Board.

1. It is more economical to administer an all-inclusive plan, there being fewer reports, less clerical help and reduced correspondence.

2. It is more harmonious, as under separate systems one group may be able to obtain more liberal provisions with resulting dissatisfactions. Investments can be more satisfactorily handled with a single fund, too.

3. There is strength in union and if in an effort to get public support for a retirement system school employes divide their efforts the legislature is less likely to be favorably impressed. Moreover, after a retirement law has been enacted certain amendments may become desirable.

If all the school employes are combined in a single system their united efforts will count.

Bieler of Raleigh, N. C., Wenslaw of Toledo, Waites and Robison, both of Columbia, S. C.

E. M. Lane, Detroit; Walter C. Hawkins, Freeport, N. Y., and A. A. Knoll, Long Beach, Calif.

A Concept of Secondary Education

HENRY L. SLATER
Superintendent of Schools, Turtle Lake, N. D.

THE basic philosophy of secondary education is probably much the same today as it was in the beginning. What has happened is this: men prominent in educational circles, in striving to arrive at a definite concept of what education in the secondary field should be, interpreted, each in his own way, what they thought or believed to be an ideal concept of education of that type. As a result we have a number of concepts, differing as to the method of reaching the goal but agreeing closely as to what the goal should be.

Theorists are not infallible. There are any number of arguments that can be advanced for and against any theory. We, therefore, cannot accept as final any concept of today in determining the operation of our secondary schools. We need to change. Almost every educator will confirm that statement. In many cases, though, that change is slow in coming about. Education for all those who want it most certainly cannot be successful in an educational sphere that requires that the same type of aid be given to all. We cannot go on prescribing and treating all our educational patients with the same medicine.

Pupils Educated by Force

The world that we live in today is overrun with too many persons who took the "treatment" in the educational hospital. It seems queer to me that men who rank high intellectually are in some cases extremely slow in acknowledging the fact that individuals do not have the same capacities of ability or learning. In cases in which these men recognize the fact that individuals differ, why do they continue to pursue the almost inhuman doctrine of "you absorb what we have to offer, or else"? The old system of forcing our educational ideas upon individuals seems to be hard to drop. Drop it we must and the sooner the better for everyone concerned. We must go much farther. We must permit a "variation of variables," instead of just a choice of our educational prescriptions. Education must be for the whole child rather than for individual sections of the child.

My concept of secondary education is intellectual freedom. This concept does not mean to imply a freedom of action but, rather, a freedom of observing and of passing judgment on those activities that bring to the individual a happier and more contented life on the outside. To be able to reach the end that this concept exemplifies, a number of objectives must be kept in mind. It is most important that we make them our means to that end.

The most outstanding methods of achieving the desired goal are through (1) growth, (2) ideals, (3) interests and (4) self-direction.

We must exchange the spirit of competition that exists in educational circles today for one of cooperation. This exchange can best be brought about in our secondary schools. We must start in this area of competition because our whole educational background is steeped in it. We compete for the grades that we receive and also for honors and scholastic favors. Our schools are traditionally competitive; therefore, it will take much time and concentrated effort to instill any other method. If we are going to begin at one certain place in this process of eliminating old ideas and theories, let us begin with the element of time.

Under the old system we are directly in competition with time. Everything is carried out in a definitely timed cycle. The school year, month, week, day and hour have a certain time pattern. We carry it over into the curriculum. We account for subjects as having been pursued for one year, one half year, five periods of a school week, with the amount of time stated as to length of the periods. We say that the elementary and secondary process of education should consume not less than twelve years of any individual's life. In so doing we work against the very principles of nature.

We have another phase, that of competitive standards. We set the standards and ask our pupils to compete with one another in an attempt to reach those standards. The most important fact, in any group, is that there are those for whom that standard is but a legend. An exact count of subjects must be cleared in an outlined time schedule. It is not a natural situation. We aid this competitive idea by offering favors in the form of grades. We say, "The work that has been covered, your attitude under formal supervision and your mathematical, or alphabetical, position on a test or paper entitle you to a percentage point of 85 or a letter B." The pupil has no idea of what this grade means, nor do we. Is it 85 per cent of what the teacher knows; is it 85 per cent of the subject matter, or is it 85 per cent of what the pupil knows?

The old type of education seems to do everything contrary to the accepted principles of sociology and psychology. We attempt to transfer learning. We try to force mental discipline. Psychologists have proved that neither can be done to any noticeable degree. There is a definite society that we must face on the outside, yet we ask people to work with us under the most unsocial conditions. It just doesn't make sense.

Intellectual Freedom Defined

In my opinion, intellectual freedom is the way out. The core of this concept can best be presented by means of the following outline of the bases of intellectual freedom.

Inside the School

Freedom of choice of subjects: (a) where the interests lie; (b) when the interests desire it, and (c) for as long a time as the interests seemingly call for it.

Freedom from the competitive principle through the elimination of: (a) educational levels of attainment as a group; (b) the present marking system and what it stands for; (c) scholastic favors; (d) the testing principle as it is set forth in secondary schools.

Freedom of time by eliminating the mathematical arrangement of time as regards: (a) four year span of high school; (b) the present requirement as to the amount of time that must be spent on any subject; (c) the length of class periods.

Outside the School

Freedom from government interference as regards: (a) subject content of curriculums; (b) omission or insertion of courses that are needed or created by interest; (c) operation without fear of failure to meet certain standards.

Freedom from patron interference from the standpoints of: (a) parental desires; (b) political ambitions; (c) ancestor worship of certain aged practices.

Freedom from institutions of higher learning in their determination to require: (a) definite standards of admission; (b) certain policies of instruction.

Let us analyze growth along the lines of the procedure stated. Growth cannot be accurately measured when the slightest tint of force is in evidence. Our intellectual growth is a natural self-inoculated process. Our growth is as we desire it from an educational standpoint. Any attempt to force this growth produces an artificial stimulation that lasts only during the period of supervised stimulation. That is why a standard curriculum fails to produce results both in the school and on the outside.

It would be possible to cite any number of examples to prove the point, but this one example is all that I am going to use and it should cover the problem: It is impossible to measure the growth of a pupil who was required to take a subject, as against that of the pupil who took the subject because his interests were there, as shown by the development.

In regard to ideals, we ask the pupil to study the ideals of men before him. We ask that he formulate a definite pattern of life. We do not tell him that he must adopt these for himself. We arrange that for him. We say that he shall have initiative, yet we take that ideal from him by our very actions of providing set rituals. Why do we not permit him to acquire his own ideals and help him to develop them in his own way?

How many times have we put the stigma of laziness, inability and even failure upon a pupil in a given subject? In all probability the simple cause was lack of interest. It is not reasonable to expect that a person will do well in a position for which he has no desire. Why expect a pupil to attain certain standards if the interest is not there? Why not permit pupils to choose subjects that are on the level of their interests? Most certainly we can hope to have much better cooperation and results if we work with pupils where their interests are.

Why should a pupil be driven into four years of English when he has a decidedly scientific mind? We do not make any attempt to force every boy to take football. Why, then, force him into an academic field in which he will be just as much out of adjustment as he would be on the football field? Our chances for success in a mental field are not any better than on an athletic field.

Self-direction is a potent force. We have not permitted it to develop along the proper lines. We have made individuals tools of our educative process instead of permitting the educative process to be a tool for self-direction. Individuals do not naturally direct themselves in our secondary field. We inhibit any such desires by our standard curriculum. What chance does a pupil have of directing himself into an interesting theme when he must be forever on the jump so as not to miss any of the required subjects?

No wonder we have so many derelicts in our society today. Why do we not permit persons to begin this self-direction in school? Why not assume that self-direction is a fundamental process and permit that process to take its natural course without endeavoring to influence it by injecting so-called "academic fluids of learning"? If pupils are mathematically inclined, why should they not be permitted to direct themselves into that field, without first going through a maze of subjects or practices unrelated to the field of mathematics?

The process of self-direction should evolve itself from those principles that we have voluntarily chosen because of certain interests and that we accept as needed for our own personal desires.

I am certain that the trend is toward individualization of learning to fit types, rather than groups. Keeping that thought in mind, is it not simple reasoning to believe that intellectual freedom is the natural end of that thought? All of the present day concepts include freedom. Our educational qualifications today may be said to be measured by the amount of freedom we have obtained in developing our attitudes of life on the outside.

Public Schools Take the Lead

DARTMOUTH COLLEGE recently announced the results of a four year comparative study of the ability of public and private preparatory school graduates to do good work in higher education. In every respect, the graduates of public schools were superior.

When the graduating class of 1940 matriculated, it so happened that it was equally divided between public and private school graduates. The study was carried through their four years in college.

Scholastically, the four year average of those who gained their preparatory work in public schools was 2.416 out of a possible 4.0 against an average of 2.168 for those prepared in private schools. It was also revealed that more public school men received high academic honors, fewer were dropped and their grades on comprehensive tests covering their entire major field were higher.

A similar study of students in the Dartmouth classes of 1941, 1942 and 1943, although incomplete, shows that substantially the same holds true.

Dean Robert C. Strong, director of admission at Dartmouth, warned against making any sweeping generalities from these tests. However, surveys conducted by Harvard, Yale, the University of Chicago and the Association of Colleges and Secondary Schools of the Southern States show the same general result.

New Laws on Personnel

M. M. CHAMBERS
Specialist in School Law

Bedside instruction is to be provided for Nebraska's handicapped pupils.

STATUTORY changes of 1941 that affect pupils and teachers in a dozen states are here reviewed. Similar legislation reported from other states earlier in the year was discussed in two previous articles of this series that appeared in the July and August issues.

New York made mandatory the formerly permissive statute that authorized the extension to children in nonpublic schools of all the health and welfare services provided by law and now or hereafter made available to children in public schools. When requested by the authorities of the nonpublic schools, these services must be provided for nonpublic school pupils. The mandate applies to public school boards, local health authorities, public welfare districts and municipal corporations.

Nebraska enacted a mandatory act for the benefit of persons of from 5 to 21 years of age who are physically handicapped to such an extent that they cannot progress in regular public school classes. Boards of education are required to pay the tuition of such pupils who are forced to leave their home districts temporarily for treatment or other care. For handicapped children who are able to profit from regular school classes if transportation is provided, school boards must furnish transportation and for those who are confined to their own homes, they must provide visiting teachers and courses of correspondence instruction as approved by the state superintendent of public instruction.

New York empowered district boards of education to pay any judgment awarded by a court against their respective districts. If there are no funds otherwise available to pay such a judgment, the board may levy a tax for that purpose. In determining whether the total bonded indebtedness of a school district exceeds the 10 per cent limitation established by statute, the amount of any outstanding judgments against the district shall not be counted.

New York, Vermont and several other states enacted approximately similar statutes regarding school safety patrols. The New York law empowers boards of education to organize patrols and appoint pupils thereto with the written consent of their parents to encourage the safe use of highways and crossings by pupils. The statute stipulates that it does not authorize the use of patrol members to direct vehicular traffic or to take positions in the portion of the highway intended for vehicles. It further declares that no liability shall attach to the school district or any of its officers or employes as a result of the operation of safety patrols. The stipulation of nonliability is probably of limited validity.

Vermont authorized the testing of sight and hearing in the schools and made a small appropriation for the purpose. Vermont also appropriated $8400 for the biennium to establish an arts and crafts program in public schools and created within the state department of education an arts and crafts advisory commission consisting of the state commissioner of education, the director of vocational education and three other members appointed by the commissioner of education with the approval of the governor.

Kansas authorized the use of buses or cars to transport pupils to all school activities within and without the boundaries of their districts.

Florida authorized high school athletic associations to insure high school pupils against injuries sustained in school athletic activities and exempted such associations from the regulatory insurance laws of the state. There is no authorization involving the use of public money to pay insurance claims.

Florida revamped the child labor statute to prohibit boys under the age of 16 from engaging in street trades during school hours. No child under 16 may be employed except after procuring an employment certificate as provided in the school code. Employed minors of from 16 to 18 must procure and file with their employers a certificate of age.

Colorado modified the certification laws to make it possible for vocational teachers to teach nonvocational courses in high schools. A special certificate may be issued to a properly certificated teacher of vocational subjects, permitting him to teach in not more than two nonvocational fields of subject matter for not more

than three classes daily. Evidence of sufficient training in the designated fields is required. The special certificates are good for one year and may be granted for three consecutive years.

In Iowa the astoundingly low statutory minimum salary of $50 per month for public school teachers was raised to $65. Maryland, stimulated by decisions of the federal courts, provided for equalizing the salaries of white and Negro teachers who hold equal credentials and perform equivalent duties by eliminating the word "white" from the existing salary schedule law and by repealing the parts of the law that established a lower schedule for teachers in colored schools. The change becomes effective January 1. The legislature made special appropriations, aggregating $130,148 for 1942 and $190,000 for 1943, to 15 counties for this purpose.

New York amended the workmen's compensation law so as to provide that school districts may bring their employes or officers within its coverage.

Two Disputed Issues Settled

Two hotly disputed matters relating to the New York City school system were acted upon by the state legislature. The law prohibiting school employes from holding dual positions was temporarily relaxed. The board of education is now authorized to permit an employe to hold other public employment, provided it is for the purpose of giving instruction in evening trade extension and apprentice training classes operated by the board during the present national emergency. This authorization expires not later than April 1, 1942.

A new statute in New York clarifies another controverted issue by stipulating that employes of the New York City board of education must submit to a medical examination by a physician employed by the board to test their mental or physical capacity to perform their duties whenever the supervising officer recommends in writing that such an examination be made. Every such person is entitled to be accompanied at the examination by a physician or other person of his own choice.

In New York State all provisions of the state civil service law applicable to its administration in cities are to apply with equal force in the school districts insofar as they are or can be made applicable. This affects nonteaching employes. The state civil service commission is directed to administer the law in all school districts except city districts. Employes who have been in the service of a school district for at least a year immediately prior to a date to be set by the commission will be entitled to continue without examination and will have the rights of the civil service class to which their positions may be allocated. After July 1, 1942, all vacancies or new positions must be filled in the manner prescribed by the civil service law.

Nepotism Law Revamped

Arkansas revamped the statute forbidding nepotism, to provide that neither the husband nor wife of a school director nor any person related within the fourth degree of consanguinity or affinity to any member of the board of directors shall be employed by the board in any capacity, except upon written petition of three fourths of the qualified electors of the race (white or colored) to which the applicant belongs.

Utah authorized the teachers' retirement board to use accumulated reserves and current contributions from the state to place in the retirement fund the state's full quota of 6 per cent of the compensation paid to all members of the system. The legislature also revised the retirement allowances upward to provide a minimum of $30 per month and a maximum of $100 per month and directed an actuarial evaluation of the system to be made as of June 30, 1942.

Kansas created a retirement system covering school employes, except school bus drivers and part-time officers of boards of education. The state school retirement board consists of six members: the superintendent of public instruction as chairman, the state treasurer, one school employe and three other persons appointed by the governor for terms of four years. At least two of the appointed members must be resident in counties having no city with more than 8000 population and not more than two may belong to the same political party.

The system provides for retirement annuities at the age of 65, with a choice open to the employe to retire at any age between 60 and 70. Annuities will be computed on an age never greater than 65. First installments will be paid next January. There is also provision for disability annuities after fifteen years or more of service.

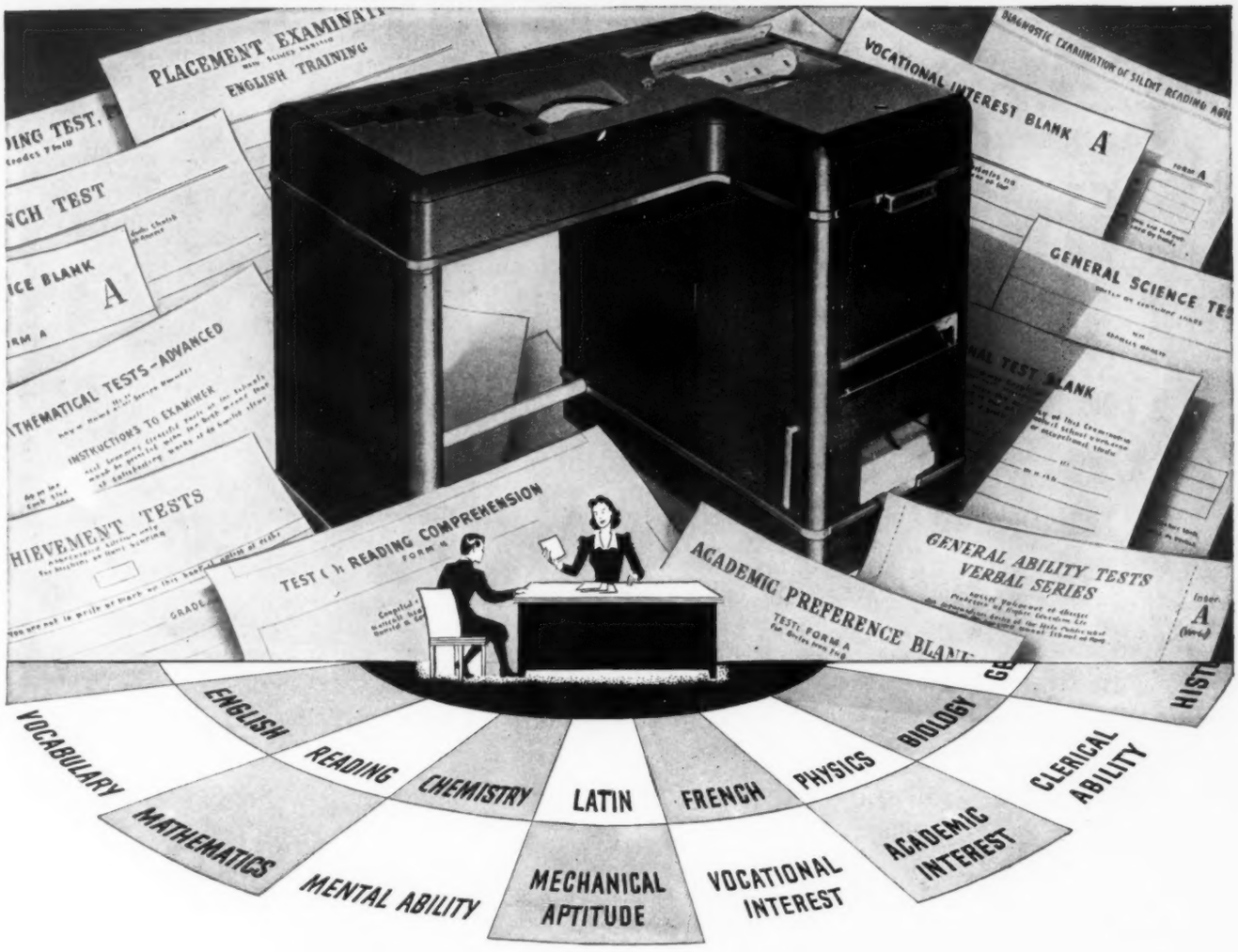
The standard service annuity is to be $1 per month for each year of service, multiplied by 12, but is in no case to exceed $360. In each case this service annuity will be supplemented by a savings annuity, derived from the amount credited to the employe by virtue of the deduction of 4 per cent of his salary, which boards of education are directed to make for this purpose. To start the service annuity fund, $50,000 was ordered to be transferred from the state aid school fund in 1941 and $65,000 in 1942. The act also declares the policy that no *ad valorem* tax shall ever be levied to provide funds for any of the purposes of the retirement system.

In addition to the general statewide retirement act of 1941, Kansas also passed two acts authorizing boards of education in cities of the first class to set up teachers' retirement funds. One of these applies to cities having a population of less than 60,000 and the other to those having a population between 60,000 and 90,000.

Retirement Benefits Extended

Illinois amended the state teachers' retirement act to include certified public health nurses and also to include all former members of the separate retirement system for teachers in state institutions other than the state teachers' colleges and normal universities. The amended act fixes the maximum retirement allowance at three fifths of the maximum salary upon which a teacher's contributions may be based. It also raises the disability allowance to $400 for a disabled teacher of twenty-five years' experience who has attained the age of 50 and makes other minor modifications.

Florida broadened the coverage of the retirement law to include members of the professional staffs of the state institutions of higher and special education, members of the state department of education and county superintendents who possess the qualifications of teachers.



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Success Does It—

When Pupils Can't Fail, They Don't

THOMAS B. PORTWOOD
Assistant Superintendent of Schools, San Antonio, Tex.

THE problem of the failing pupil is one that challenges all teachers and school administrators. In every school, and particularly in every high school, there is a group that falls below the so-called "passing line." There is a broad chasm between pupils who are above this line and those who are below it. Much could be written about the effects of such a division on pupils and on the school generally. It may be that pupil failure is an unnecessary evil that the schools themselves have built up in the name of educational efficiency. In San Antonio, Tex., an effort is being made to remove the chasm by removing the failing group.

Both the passing and the failing groups have been created, of course, by teacher judgment. Pupils have been judged as to their excellence and the results of such judgments have been entered as part, and in most cases the major part, of the pupil's school record. The important fact, however, is that school records are not confined to the school; they follow pupils far into adult life.

Important decisions are constantly being made not only about school children while they are in school but about adults long after the school period is over. On the basis of such judgments, people have been denied employment, refused admission to college and otherwise rejected all because of the record made when they attended school. School reports, therefore, are far-reaching and really influence the lives of both children and adults.

Accuracy of Marks Questioned

The picture is not improved when one examines the evidence as to the accuracy or consistency of teachers' marks. We find almost as many standards as there are teachers. We also find that individual teachers are unable to maintain the same standard for relatively short periods of time. In other words, the record that follows the school pupil is based on judgment that, at best, is rather fickle.

Recently, efforts have been made to supplement and improve the traditional marking systems through the introduction of other elements, such as objective test scores, character trait ratings and general written reports, that present a better picture of the child. Such innovations have had more success in elementary and junior high schools than in senior high schools. The high school seems to cling to the subject mark awarded by the individual teacher.

Many reasons are given by high school principals and teachers for using marks. The most common reason is that marks stimulate pupils to better efforts and afford a means of checking by both pupil and parent. Granting that such a check is needed and granting also that teachers' marks may form such a check, we always come back to the problem of the effect of failing marks upon pupils who receive them.

It is one thing to mark the pupil "A," "B," "C," "D," all of which place him above the failure line, but it is quite another to mark the pupil as being a failure and have that notation entered upon the records, perhaps to follow him for many years. Surely, the elimination of the fear of failure, and there is such a fear in our schools, should release pupils for more creative work all the way round.

How can the fear of failure be eliminated? It can be done only through an attempt to build up in school the idea of success. When pupils can be made to feel that everyone can be successful in the pursuit of a school career and when each pupil realizes that the chief function of the school and of all teachers is to ensure his success and to guide him into ways of being a successful pupil, the fear of failure really will be removed.

With this in mind, an experiment is now being conducted at Phyllis Wheatley High School in San Antonio, Tex. It is an effort to learn more about the whole failure question. The school is a colored high school composed of grades nine, ten and eleven. It prepares pupils for college but also has a strong vocational and practical arts program. A small number of the 650 pupils enrolled go to college. Three years ago the principal and teachers of this school decided to eliminate the whole failure idea from the school. Pupils were told that, henceforth, no one would be permitted to receive a failing mark. It was pointed out that success in school was to be achieved through the cooperation of pupils and teachers and that, certainly, the pupil would have a definite responsibility in working toward success. It was stated definitely, however, that failure in the sense of the traditional "F" was to be abolished and that no pupil need have any fear of being awarded such a mark. In short, failure was abolished insofar as awarding failing marks was concerned. The "F" mark was eliminated.

Abolishing "F" Upsets School

The reaction to this announcement was, of course, pronounced. One heard such remarks as the following: "If we don't get any failing grades, what is the use of studying?" "Why should I work if I can't flunk?" And from some of the teachers: "How can I force my pupils to work if I remove the threat of failure?" "Pupils will not come to school if they know they can get by anyway." "People fail in life so why shouldn't they fail in school?"

These and many other statements from both teachers and pupils indicated clearly that quite an upheaval was expected when the failure motif was removed.

Never before had we realized to what extent the school was molded around the idea that certain pupils

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could not and should not make successful records. It began to appear as though an important function of the school had been to produce a certain percentage of failures and now, with "failure" removed, the school would be weakened in some vital function. Certainly, a new way of looking at things would have to be developed. So principal, teachers and pupils went to work. As one teacher put it: "Let's try to find out if failure can be eliminated without ruining the school."

Certain factors began to be apparent almost at once. In the first place, the pupils, as a whole, seemed to display a new interest in the school. Attendance did not drop. The desire of pupils to do good high school work did not lessen. In fact, some teachers reported that interest was greatly increased and that it seemed that high school pupils could be motivated entirely by the desire to learn rather than by the fear of failure. However, many teachers found it difficult to adjust to the new program. The idea that all could be successful just did not square up with the usual way of doing things in a high school. For generations school had been thought of as a series of hurdles. Some pupils could not take the hurdles and so failed. It was not easy to think of a high school in which all pupils succeeded in taking the hurdles. Never was there proof more positive that failure as a fear and as a threat had been used in some instances to conceal defective teaching.

When failure was removed as a possibility, the school began to have more purpose. Purpose leads to wholesome attitudes. However, we found this adjustment difficult to make. We did find, though, that a more effective type of educational guidance would have to be developed. All teachers were challenged by the new situation. As one said, "Since I cannot award a mark of failure, I simply must find a way to help the pupil to be at least somewhat successful. I cannot have a pupil go through my class and do nothing if I cannot fail him."

In this manner teachers began to think in terms of the individual pupil. Plans were made for the individual rather than for the class. Pupils who were slow were not given up as hopeless but rather were guided into productive and interesting types of work. We think we can now say definitely that pupil interest does not depend on the fear of failure. In fact, the probability of success seems to increase the interests of pupils. We think we can say that failure can be eliminated as a standard school procedure and in its place can be substituted more happiness, more interest and more zeal to learn for the sake of learning.

Technic for Reading Pacing

JAMES GULICK

Elementary Schools, Livermore, Calif.

THE typewriter technic for reading pacing consists of placing reading matter in the machine and then spacing it with the carriage-return to maintain a speed of a certain number of words per minute. Any typewriter can be used for this work without special adjustment.

Let us take a practical reading situation for an example. In testing a child who had lost a dog and was, therefore, reading every dog story she could obtain, I typed the first 600 words of "Byng Turns Detective," a story from "Let's Read!," on two pieces of paper that were pasted in the middle so that we could keep the carriage moving constantly at the same rate of speed without having to insert a new sheet of paper into the typewriter. The words were spaced so that we had 10 words to the line. Inasmuch as she was supposed to achieve a reading speed of 300 words per minute, she was gauged to read 30 lines per minute. In order to "gauge" the lines I pressed the carriage-return every two seconds. Had I wanted her to read 200 words per minute I would have pressed it every three seconds.

For further adaptations a different number of words per line are typed. Suppose one wished a fourth grader to read at his grade norm of 168 words per minute, or 2.8 words per second. Eight words would be typed on each line, except the last, which would have four. The line carriage would be pressed by the teacher every fourth second. For a final example, in testing the rate norm for seventh graders, which is 210 words per minute, 11 words would be typed per line for the first 25 lines, with 10 words per line for the next 15 lines. The last line would contain five words.

So far, our technic has taken care of only two minutes in reading time per article. After the child has adjusted himself to that pace for two minutes, he is given the open book with the place marked from which the story continues. I have experienced good carry-over in the reading rate between typed material and printed material. The typewriter technic is found to have strong carry-over value.

When the child has achieved a certain speed in a particular phase of reading, such as reading to note detail, he is given typewriter technic material at an increased speed. All of these articles are followed by quizzes. The pupil is told whether questions will be general or specific so that he can adjust his speed.

The material is not typed in phrased form, unless moving pictures of eye movements have been taken to show where natural phrasing will come with respect to the child's reading span in inches. This cannot be figured without data on the number of fixations the child makes per hundred words. The typed material must then be revised in terms of the child's increasing reading span. Phrased material should be closely followed by full-typed lines to decrease the pupil's concern with the mechanics of reading.

I used the typewriter technic with 12 reading problems (I. Q. ranging from 89 to 143, Form L, Stanford-Binet Intelligence Test taken collaterally). The pupils tested ranged from fifth to eighth graders and they averaged an improvement of 1.16 grades per pupil over six weeks' time as Gates (battery) tested. The interest background was used exclusively. No attempt was made to make the pupils test-wise by preparing them to develop for testing on testing materials, as had been so frequently done in remedial reading programs of a decade ago.

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Problems of the Teacher-Manager

RUTH A. RUSSEL
Home Economics Teacher and Cafeteria Manager
Central High School, Lansing, Mich.

THE types of management of the school cafeteria are numerous and varied. Some cafeterias are managed by a person with no home economics training and with no supervision by the home economics department; some are managed by a person who has no home economics training but is supervised by a director with training; some are directed by a trained home economist with no outside duties, and still others have the teacher-manager, a home economics trained person, who teaches in addition to managing the cafeteria.

The ideal situation is that in which the home economics manager has no duties other than those connected with the school cafeteria, for the management of a cafeteria requires a great deal of time and thought. The majority of cafeterias, however, are operated by teacher-managers. A study by Edna Gilbert, cafeteria director of the Rayen School, Youngstown, Ohio, which appeared in the *Journal of Home Economics* for January 1940, showed that the amount of time allowed for the management of the cafeteria ranges from thirty-three minutes to one hour and forty-five minutes, exclusive of the lunch period.

Time Allowed Is Insufficient

The consensus of many teacher-managers, as expressed at recent meetings, is that three and preferably four teaching periods should be allowed for managerial duties in connection with the cafeteria and for the health education that is identified with these duties. The allowance of two teaching periods is the minimum and is satisfactory only in cafeterias that feed fewer than 50 children. Let us note some of the duties and responsibilities of the teacher-manager.

The school cafeteria is, of course, one of the big factors in the health of the school. Skill on the part of the teacher-manager in planning menus and in attractive service of nutritious lunches determines just how much that health is emphasized. She must work closely with all other plans for the health education of the pupils. Considerable time should be made available to the teacher-manager for this phase of her work. For example, in a large school that feeds around 2000 at noon, 2000 half pints of milk are served. The consumption of this quantity of milk does not just happen but is brought about by educating children to drink milk. The teacher-manager is largely responsible for the educational program.

In many schools planned activities, such as games and movies, keep pupils at school during the noon period. This seems desirable because more pupils avail themselves of the opportunity to buy a well-planned school lunch. An atmosphere of relaxation and freedom should prevail during the lunch period and with it a certain discipline and dignity. This requires planned supervision and, inasmuch as the manager is also a teacher, such supervision frequently becomes one of her important responsibilities.

The teacher-manager is always interested in trying out new recipes to give variety to the food served. This requires work with the cook during and after preparation hours. Then, too, there are certain standards in the quality of food and in cleanliness in preparation that must be met. The teacher-manager must work kitchen supervision into her busy day.

Responsibility for the welfare of both pupil and adult workers must be assumed with the management. Duties must be carefully outlined and workers must be supervised.

The business side of the school cafeteria requires considerable time. This part of the management includes checking goods as they come in, checking daily invoices and invoices with statements, paying bills and keeping records of all transactions. The money that is taken in must be accurately handled, checked and deposited. Certain daily reports are necessary and at the end of each month a complete financial report should be made to show just what the status of the business is in dollars and cents. This includes taking and figuring the inventory at least once a month, unless a perpetual inventory is kept.

Manager Must Be Good Buyer

A usual requirement of the school cafeteria is that the running expense be covered by the lunchroom sales. In order to keep the sale price low so that food will be available to the largest number of pupils, it is necessary that care and skill be exercised in buying. Costs of foods served must be figured so that they can be sold for a price that is sufficient to cover the cost of raw materials plus overhead but is not higher than pupils can afford to pay. This one duty requires more time than would be thought at first consideration.

It is quite usual for the school cafeteria to be closely linked with the organization of the school in providing food for special occasions, such as refreshments for club meetings, picnics and teas. This includes planning with the groups served. The cafeteria usually offers this service at cost, and it necessitates the handling of extra foods and records and the additional bookkeeping that goes with it.

The provision of meals to certain other organized groups, such as teachers and parents, is an added

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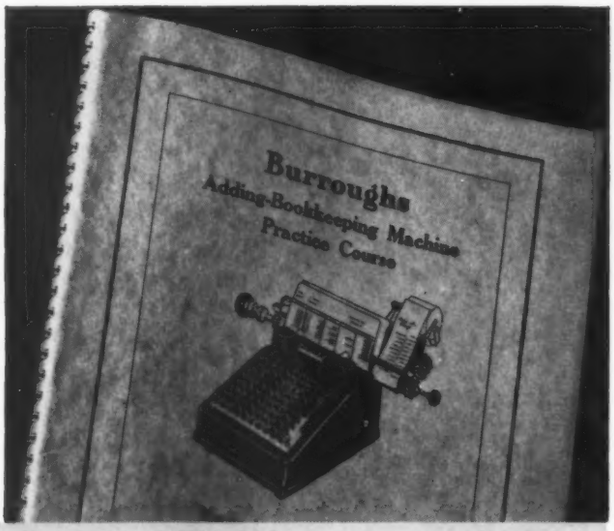

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responsibility. These meals are usually served in the evening in the form of dinners and banquets and necessitate much added time for planning, buying, service and cleaning up.

As in any business, it is not at all unusual for the cafeteria to do a certain amount of advertising, which falls upon the teacher-manager. This is done through several channels—articles in the school and local papers, student council committees, daily posting of menus, special day lunches (Halloween, Thanksgiving, Valentine's Day, Washington's Birthday), talks to homerooms, assemblies and parent-teacher meetings.

This outline indicates not only how many and varied are the duties of the teacher-manager but also how time-consuming they are. In schools in which the cafeteria manager also teaches, her classes vary considerably but are usually in home economics work, which, of course, take time to prepare. Some of the classes are in cafeteria management, foods work, home management, home assistance, marketing and clothing, and some teachers have charge of homerooms or study halls or girls' work. Less often, the classes are outside of the home economics field and require teaching of mathematics, social sciences or English. Training of N.Y.A. girls and boys is a newer addition to outside work.

One teacher, for example, in a school in which 1700 meals are served daily has a full schedule of teaching home economics so that she must do all planning for the cafeteria, which includes the duties outlined, as well as for the other classes she teaches. In order that these added classes may be carried on, it is necessary to cut down the time spent on the cafeteria or to spend time outside the regular school hours. The latter is usually what happens.

In view of the cafeteria's importance to the health and well-being of the school, the cafeteria manager should have sufficient school time allotted her and should be free to carry on routine activities and to initiate ideas for the general progress of the school through the school cafeteria.

What Makes a Manager?

CLARA CHESNUT

Director of Cafeterias, Tulsa Public Schools, Tulsa, Okla.

NO CAFETERIA is better than its leadership. Therefore, we should make every possible effort to employ a manager who possesses the highest ideals, intelligence, skill and a devotion to her work. Liking one's work is a short cut to success.

A manager who is willing to work at any task, ready for new tasks and alert to ever-changing methods is essential to any organization. Imagination should also be included because our work demands creative power.

Courtesy is a virtue that can never be overestimated. It is a challenge. We know how difficult it is to remain calm and courteous when things go wrong. While courtesy is a challenge, however, it is well to remember that it is the best means of getting what we want from people. Also, it cannot be limited; it works just as well with the delivery man, pupils and fellow employes as it does with those who have greater prestige.

Method is another virtue that should be kept in mind and one that is most important to the cafeteria employe. The worker who is neat, both mentally and materially, is sought after in every group. Without well-planned method and consistent organization the cafeteria would disrupt the whole school schedule.

Think of a person who is a systematic organizer and check her success as a cafeteria manager. That process of clear thinking enables her to gain the confidence of all the people with whom she works and, as a result of that confidence, the smoothly operating organization moves with optimism, cheerfulness and sympathetic understanding.

Good work cannot be accomplished when there are uncertainty and fear as to the final outcome of the finished product or a fear that the job will not be completed at the proper time. Punctuality is the very foundation of a cafeteria. We must be punctual in arriving at work each day; we must be punctual in preparing the food, and—the final and most important must—we must serve the food on time.

There is only one time during the day, in fact, when punctuality cannot be considered, *i.e.* quitting time. A successful manager cannot leave by the clock. There is never a set time when she can leave. The plans for the following day must be completed regardless of time.

"Unreasonable haste is the direct road to error." How many failures in the cafeteria are due solely to unreasonable haste. After the product is ruined is no time to moan. "Haste makes waste."

We must often work rapidly, but organized method will go far in preventing the need for unreasonable haste. However, there comes a time when haste is necessary. The successful cafeteria manager must have the ability to make quick decisions.

Perhaps we should add that we must learn to acknowledge mistakes at the same time we learn to make decisions. An alibi for a mistake will never take the place of a sincere "I'm sorry."

"A pound of pluck is worth a ton of luck to any cafeteria employe." It is essential that we adapt ourselves to our work and take a keen interest in our profession. Then when we couple our skill and common sense to pluck we are not compelled to rely on that fickle, undependable luck.

If a cafeteria manager has a sufficient quantity of common sense, a genuine liking for people, the knack of commanding cooperation from both the patrons and employes of the cafeteria, plus excellent physical condition, she cannot help but be a success.

Movies Tell School Story

CHARLES A. GRAMET and JOSEPH T. SHIPLEY
Franklin K. Lane High School, Brooklyn, N. Y., and Stuyvesant High School, New York City, Respectively

Chicago schools, also, are telling their story via motion pictures. These Englewood High School seniors are shown at work on the full length feature that was a project of the graduating class and was presented to the parents on the night of graduation. It was shown again to incoming freshmen to acquaint them with the school's program.

THE problem of adequately presenting the work of the schools to the parents and public that support them is one that may well receive the thoughtful attention of schoolmen. Parent-teacher organizations, open house week, exhibits and occasional newspaper articles are all useful. The most effective agent today, however, is the motion picture.

The municipal government of New York City recently undertook to show the taxpayers how their money was being spent. One of 68 departments, the board of education was allotted an extremely limited sum of money with which to carry out its part of the program. The committee appointed to work on the project was convinced that the only way to tell the story of how the school system is training its million children for effective living in a democratic state was to show the pupils actually at work, and that the motion picture was the most logical medium that could be found for this purpose.

A film production unit was set up under the general direction of Stephen F. Bayne, associate superintendent of schools. A number of teachers were given temporary assignments and commissioned to create a series of motion pictures. The division superintendents designated representatives to assist the committee in presenting the philosophy and its application in the schools of their respective divisions. These representatives conferred with the director and scenarists.

A scenarist then made a survey and study of a particular story or problem in the schools. A scenario was written and submitted to the departmental representative for criticism or approval. When the script was approved, the picture was photographed.

Sixteen millimeter film was used exclusively. After the picture was taken, it was roughly assembled for preliminary editing. A showing was arranged at which the director, the superintendent's representative, the scenarist and the editor were present. Suggestions for the final editing were made at that time. Before a picture was approved for exhibition, it was again viewed by the committee.

The result is a series of documentary records of the activities of the school system comprising the following titles:

- Education for an Industry
- Education of Exceptional Children
- Education for Food Production
- Education for Art Weaving
- Education for Art Appreciation—Elementary Schools
- Education for the Printing Trade
- Education for a Flying Age
- Education in a Cosmopolitan High School
- Education for Industrial Art
- Education for Beauty Culture
- Education for a Literate Age
- Education for an Artistic Age
- Education for a Scientific Age
- Education for Safety
- Education for Citizenship—Elementary Schools
- Education for Citizenship—Secondary Schools
- Modern Methods in a Modern School
- Education for Civic Appreciation
- Education for Nature Appreciation
- Cooperative Education
- Education for Music Appreciation—Elementary Schools
- Education for Music Appreciation—Secondary Schools
- School Children Visit the World
- Education for Health
- Guidance
- Education for Social Relationships
- Education for Speech Improvement

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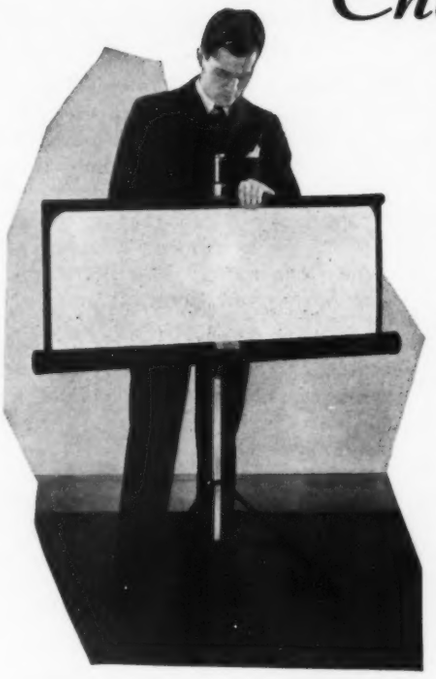

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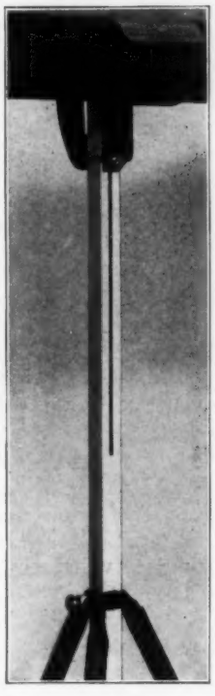
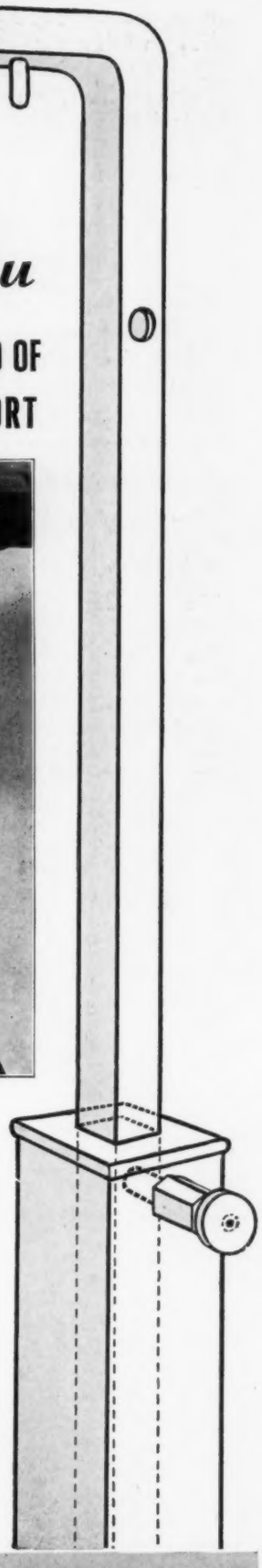
Solid Square tubing (instead of a thin metal strip) in the extension support gives unequalled rigidity and strength. It makes all sizes of screens from 30″ x 40″ up to and including 52″ x 72″ hang perfectly, without sag, wobble, or possibility of the extension rod bending, even when ***raised*** **to the** ***highest position.*** **No other screen has this essential feature. It is an exclusive, patented Da-Lite improvement.**





To open legs, slip collar down on tubing and legs lock automatically at proper place.

The Challenger is the only screen that can be adjusted in height merely by releasing a spring latch and raising extension rod.

AND ALL OF THESE OTHER VITAL FEATURES

Smoother Operation—**The extension rod fits snugly inside the center rod tubing of the tripod, yet it moves freely without risk of injury to the fingers in its operation. A flange at the lower end of the extension rod extending through a groove in the center rod tubing contacts the screen case and raises it, when the extension rod is raised. There are no extra movements.**

Positive Screen Height—**When the Challenger is raised to desired height a spring latch pushes plunger into a drilled hole in the extension rod and locks it firmly in position. There is no friction lever to slip. No thumb screws to tighten.**

Sturdier Construction—**Steel stampings only are used instead of castings (which are liable to break). The handle brackets encompass square tubing instead of being attached to the thin metal part of the case.**

Genuine Da-Lite Glass-Beaded Surface—**This fabric, famous for its light reflective qualities, is recommended by all the leading projector manufacturers and is chosen by leading industrial organizations for their sales and training films, to insure the brightest and clearest projection.**

Greater Value—**Volume production and efficient manufacturing methods, perfected through 32 years of experience, account for Da-Lite's greater values. You can get a Da-Lite Screen for actually less than your second choice screen would cost. See the Challenger and other Da-Lite models at your dealer's! Write for literature! Da-Lite Screen Company, Inc., Dept. 11TNS, 2723 No. Crawford Avenue, Chicago, Ill.**

Look for the name DA-LITE (Reg. U. S. Pat. Off.) *when you buy!*

Education for Art Appreciation—
High Schools
Education of the Handicapped—
Crippled Children
Ambulatory Hospital Cases
Deaf Children
The Blind and Near Blind
Mentally Retarded
Education for Tolerance Through
Foreign Language Study
Dancing in City Schools

The 30 pictures that were originally planned were expanded to 38. Of these, five are in color and five are short sound films of the work in music in all grades.

It was necessary to confine pupil participation to the acting rôles for we had to produce a series of good pictures in a short time. Of the three choices available, *i.e.* professional production, pupil production and teacher production, we were compelled to use the third. The films make a fitting complement to the annual report of the superintendent of schools, "All the Children," which utilizes the printed word and still pictures. In both cases, they are excellent reports to New York's citizens on the work of their children and their schools.

Educators Will Discuss Audio-Visual Problems at Southern Conference

The three day session of the Southern Conference on Audio-Visual Education, to be held in Atlanta, November 13 to 15, will be devoted primarily to the topic of teaching aids found in such modern devices as the sound film and radio.

The program will include showings of new educational films; several general sessions, featuring talks, demonstrations and film previews, and one afternoon of specialized group forums at which educators and technicians will meet for an informal discussion of mutual problems. The latest types of projection and sound equipment will be exhibited.

A number of outstanding authorities in the fields of radio and visual education will participate in the sessions and a wide attendance is expected for the meeting.

Broadcasts to Tell Story of Achievements of Negro Race

"Freedom's People," a new group of six educational programs dramatizing achievements by Negroes that have sped progress in national defense, industry, science, agriculture, social services and the arts, is being broadcast once a month over the red network of the National Broadcasting System from 12:30 to 1 p.m., Eastern time.

The program is sponsored by a special committee with which the U. S. Office of Education cooperates. "The double purpose of 'Freedom's People' is to show America the abilities and aspirations of its Negro population and to spur Negroes themselves to greater service by examples of their work," it was stated by John W. Studebaker, U. S. commissioner of education.

Listeners Will Participate in New NBC Radio Forum

"Wake Up, America," a Sunday radio forum sponsored by the National Broadcasting Company in cooperation with the American Economic Foundation, has made its debut.

The subject of the first broadcast was "What Would Be the Economic Consequences of our Direct Participation in War?"

During the first half hour of each broadcast citizens of specified towns are invited to telephone questions to their local NBC stations. The first 10 queries received are telephoned or teletyped to the broadcasting studio in New York and at least five are answered by the speakers during the last half hour. Members of the studio audience also are permitted to ask questions of the speakers.

Sound Projectors and Films Distributed in South America

Thirty 16 mm. sound projectors have been sent to embassies and consulates at key spots in South American countries by the Office for Coordination of Commercial and Cultural Relations Between the American Republics, it was announced recently by the Association of Documentary Film Producers.

The projectors were sent as the first step in setting up a nontheatrical distribution system for 16 mm. showings in South America. Twenty-three films to supply the projectors have already been completed and 14 more are to be finished in the near future. All of these films are especially edited and sound tracked versions of pictures that had been made for some other purpose.

The work of preparing and distributing the films is under the direction of Kenneth Macgowan, director of production of the motion picture section of the coordinator's office.

Film Releases

History in the Making—Series of sound shorts that dramatically visualize the problems of the world today. The series includes 19 pictures each having a running time of five minutes. 16 mm. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York, N. Y.

"Hi! Slouch!"—16 mm. sound film in color explaining the history and production of hats. It portrays to pupils the advantages of correct dress, better posture and a generally well-groomed appearance. Sponsored by the Hat Style Council. William J. Ganz Company, 19 East Forty-Seventh Street, New York, N. Y.

Westward Movement—By means of animated drawings the story of the westward trek from 1790 to 1890 is illustrated in its geographic setting. The events unfold in proper chronological order. Territorial expansion, routes of migration and admission of states to the Union are among the topics developed. 16 mm. sound. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

The Making and Shaping of Steel—Most recent film in a series on the subject of steelmaking, produced by the United States Steel Corporation. The films are being used as mediums of instruction for men in factories and arsenals engaged in defense projects. They are also suitable for use in high schools and colleges. 16. mm. sound. United States Steel Corporation, 208 South La Salle Street, Chicago.

English Teachers' Council Publishes Film-Making Manual

A manual for teachers and pupils who are interested in producing amateur films, entitled "Producing School Movies," has been published by the National Council of Teachers of English, Chicago. It was written by Eleanor D. Child and Hardy R. Finch, experienced amateur producers.

The book was published as a result of a survey made by the council which revealed that more than 300 teachers of English had been engaged in producing motion pictures for classroom use.

Copies may be obtained from the council for $1.50 each or for $1.10 if more than six copies are purchased.

An invitation—

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VICTOR ANIMATOGRAPH CORPORATION

MANUFACTURERS OF
16 M.M. MOTION PICTURE CAMERAS & PROJECTORS

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To Administrators Everywhere –

If "accomplishment" is a creed with you – as it has been with us here at the Victor factory over the past 32 years – you can understand why Victor Sound Motion Picture Projectors have never had an equal in quality, regardless of price.

This "Victor creed of accomplishment" has been valued so highly that it is quickly recognized in the many patented exclusive features – the finer materials – the superb craftsmanship – and the resulting superior sound and professional quality of the pictures it reproduces.

If you have not had the opportunity to see the Victor Animatophone – or to hear it – we sincerely invite you to request a demonstration from our factory-trained men – one of whom is close by in your territory.

Your request will be personally appreciated and directed.

Sincerely,

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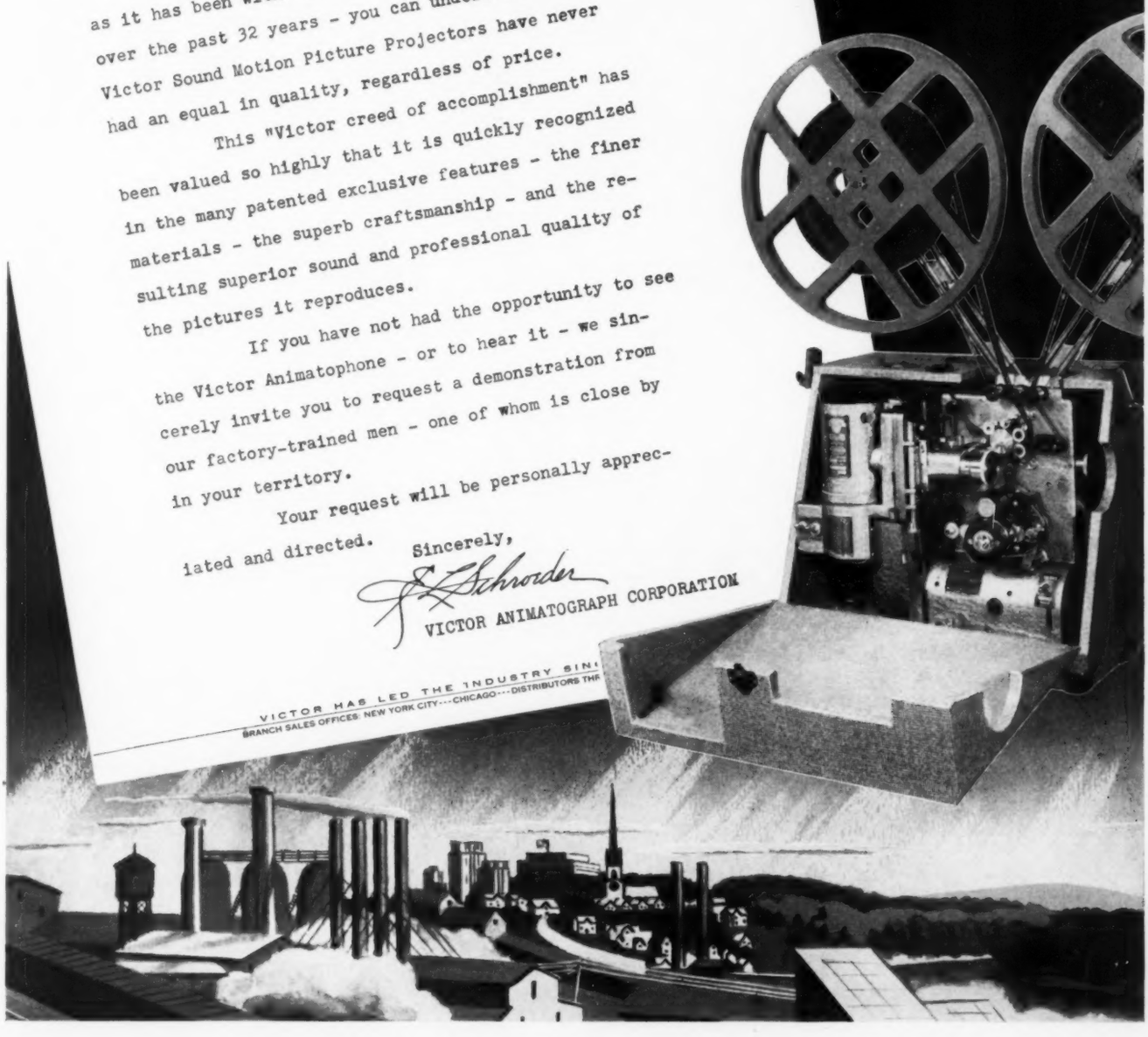

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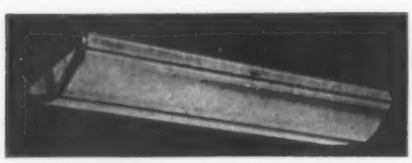

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SUSIE'S SPELLING

O, you who view life's problems with a pedagogic eye,
Who know the final answers to the wherefor and the why,
Who streamline modern measurements in personality
And give the nod to latest styles in methodology.
O, you who know the meanings of each childish whim or trick,
The drives and mechanisms that make modern youngsters tick,
And you who write the articles so difficult to read,
With their drear and tasteless footnotes that do nothing but impede.
Give ear unto my problem, ye who on Parnassus dwell,
Despite all you have taught me, I can't make Susie spell.

I have tried evaluation and tests appropriate
But Susie is immune to tests and won't evaluate.
Her spelling personality is quite beyond control;
Is it Susie's psyche, Doctor, or is it Susie's soul?
For Susie's mother writes me that my sins are past "beleif";
Susie's father writes the board that he must have "releif."
My supervisor leaves a hint that all is far from well;
No matter how they push me round, I can't make Susie spell.

Now Susie knows the rhumba, though she's just in junior high,
And when the swing cats gather, the gal is far from shy.
In cooking class, 'tis said, she swings a wicked recipe,
And the way that Sue can mix a cake is marvelous to see.
Susie leads the chorus, she drum-majors for the band,
Her repartee, I must agree, out-sallies Sally Rand;
In leadership she gets an "A," she hits the highest pitch—
But never can I teach that kid that "wich" is sometimes "which."
O, answer me, ye wise ones, are my methods out of date,
Are my data unreliable, my test inadequate?
Is it heresy on my part when I feel inclined to yell:
"Who cares a tinker's damn, my friends, if Susie doesn't spell."

JUDGING by the program preprints, the dues duns and the please-remit-$5-for-the-dinner letters that are piling up on my desk, the open season for educational conventions (September 1 to June 30) is entering upon its climacteric crisis. And, woe is me, I have a "paper to read" on the "Future of Education."

Not that I have a desire to write or read a paper on the "Future of Education." When I go to educational conventions I want to sit with my colleagues in the rear seats and snooze the happy hours away.

But from sad experience, I know just how I got this particular paper reading job. When a so-called friend found himself stuck with a program, he thought of me. I owed him a paper for services he once rendered my Rotary Club when I was hard up for a fill-in. So he aimed to collect.

This monkey business of prophesy in education has a hallowed tradition. The Greeks had a word for it. They used to hold all their educational conventions at Delphi where the local chamber of commerce had erected "the largest convention hall in the world."

When the educators assembled, the convention officials were wont to hoist the speaker onto the platform over the Delphic furnace and await results. As the victim got warmed up he began to mutter unintelligible nothings probably because he could not read his secretary's manuscript.

His wisdom, although somewhat disjointed and incoherent, was received with acclaim by those present and, owing to some mysterious abracadabra dear to the hearts of educators from time immemorial, the more confused and wordy he became, the greater the applause from those present.

The sacred prophecies thus inspired were jotted down by the priests (stenotypers) and rushed to the executive committee for inclusion in the yearbook.

Thus, in those ancient days, were educational policies broadcast.

What matter if a few like Croesus got so mixed up that their boards of education threw them out and elected a new superintendent? Present, past or future it is ever thus. And so I shall write a Paper.

"In Our School, WE PUT IT ON A RECORD!"

"We've found a way to teach that's not only stimulating to the boys and girls in class, but highly effective as well. We do it with our new portable

RCA Recorder

—and here's the way we do it."

"There's the case of Charlie J. He was having a terrible time in the speech class until he made a record. When he heard himself as others hear him he worked extra hard to correct his faults, is now a first rate speech student."

"Then there's the case of Emily T. A bright girl in every other way, she simply murdered music. Some recordings, made in the music class, helped Emily discover her faults, made music one of her favorite subjects."

"Our RCA Recorder, easy to carry, is also used in many other classes, helps with dramatics, glee clubs and choirs, enables us to record the talks of prominent speakers for eventual classroom use. We also record school events."

Here it is—Portable RCA Recorder MI-12701. Surprisingly low in cost, it records at 78 r.p.m. on 6-inch to 12-inch records. It comes with Amplifier, Visual Indicator Meter, RCA Aerodynamic Microphone. It provides immediate play-back of records. Send coupon for full details.

These four essentials . . . yours in an RCA Victor Recorder!

1. **Records and reproduces with amazing accuracy.**
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3. **Utmost dependability.**
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And to complement Hygieia Dustless Crayon, we have the **Hygieia Chalkboard Cleaner,** with its cellular latex cleaning surface for ordinary classtime erasures and its lambskin surface for end-of-the-day cleaning.

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THE AMERICAN CRAYON COMPANY

News in Review

141 School Defense Projects

A total of 141 projects has been approved under the Lanham Act for the construction and operation of schools, it was reported by the Federal Works Agency on October 8. The estimated cost of the projects is $30,469,353.

Twenty-five of these projects are for the maintenance and operation of the schools, to which the federal government will contribute the full amount of their total cost of $1,344,773. The purposes for which the maintenance and operation funds will be used will vary with the needs of the applicants. In some instances they will be used to purchase needed supplies and equipment and in others, to pay the salaries of additional teachers.

John M. Carmody, federal works administrator, has allotted to the 116 school construction projects $15,583,090 in Defense Public Works grants, $534,200 in D.P.W. loans and $8,285,780 in funds for federal construction. Applicants for school projects have contributed $4,721,501.

School projects will be constructed by the Public Buildings Administration's newly created Emergency Operations Unit which has been set up especially to expedite the building of schools, hospitals, health centers and clinics.

Priorities for Schools

Three preference ratings for schools have been issued by the Office of Production Management, one is pending and another is being earnestly sought, as this issue goes to press.

The preference rating orders that have been issued are as follows:

1. School Buses. This is limited purchase rating order No. P-44.

2. Research Laboratory and Supplies Equipment. This is No. P-43.

3. Repairs for Property and Equipment of Schools and Colleges. This is No. P-22.

Hopes are high that there will soon be issued a preference rating for "expendable school supplies."

"We still have to fight for an order covering school equipment," said L. E. Parmenter, executive secretary of the National School Supplies and Equipment Association.

The new maintenance and repair order issued on October 12 (P-22, Amended) permits schools to obtain needed materials and supplies for maintenance and repair and allows them to use the same priority to obtain "operating supplies," which means "any material which is essential to the operation of the producer's business and which is consumed in the course of such business."

The preference rating for "expendable school supplies" will undoubtedly be in effect before November 1, the U. S. Office of Education indicates.

MEETINGS

Food Service Conference

The problem of furnishing adequate nutrition in cooperation with the national defense program will be uppermost in the minds of delegates to the seventh annual Conference of Food Service Directors meeting in New York City, November 6 to 8. The theme of the sessions will be "Making America Strong by Making Strong Americans."

Thursday afternoon and Friday morning will be occupied with registration and trips to high school and college dormitory lunchrooms, and to a central kitchen where approximately 80,000 free luncheons are prepared daily.

The speakers scheduled to address the dinner meeting on Friday evening include Dr. Helen Mitchell, civilian defense coordinator on nutrition, whose topic will be "Adequate Nutrition for the School Lunch"; Ordway Tead, president, New York City board of education, who will speak on "Personnel Administration," and Dr. William Schmidt of the U. S. Children's Bureau, discussing "Medical Evidences of Nutrition."

Saturday morning will be devoted to breakfast round tables and to a "town meeting" of food directors, at which Dr. Mary DeGarmo Bryan, Teachers College, Columbia University, will preside. Dr. Grace McLeod, professor of nutrition at Teachers College, will speak on "Feeding the School Child."

The conference will close with a luncheon meeting on Saturday at which the speakers will be Margaret Batjer, home economics projects section, W.P.A.; Eloise Davison, assistant director in charge of nutrition, Office of Civilian Defense, and George H. Chatfield, director of child nutrition projects, New York City.

Michigan Administrators Meet

Dr. Chester F. Miller, superintendent of public schools, Saginaw, Mich., was elected president of the Conference of Michigan Superintendents at the annual Traverse City meeting, September 18 to 20. Supt. Dorr Wilbur of Manistee was chosen vice president and Supt. George

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THIS Heywood-Wakefield desk provides *maximum utility* with a minimum of maintenance costs. Soundly built from heavy gauge seamless steel tubing, it's virtually wearproof. Available in graded sizes, it offers comfortable, correct seating for every pupil. Fitted with a simple, positive adjustment, this efficient *Unit Movable* design rarely requires attention. We shall be pleased to furnish you with complete details on this and other practical Heywood-Wakefield Desks and Chairs.

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BALTIMORE, MARYLAND

Walkotten of Albion was elected to the executive committee.

The 1941 conference, under the leadership of L. C. Mohr, superintendent at South Haven, discussed the part that public schools are playing and should play in national defense, the need for eliminating conflicts in school law, professional growth of teachers, state aid, guidance, special education, community interpretation and school contests.

Junior College Group to Meet

Robert G. Sproul, president of the University of California, is scheduled to be the principal speaker at the three day conference of the Association of Junior Colleges which will be held in Los Angeles, February 26 to 28. The association is now carrying on an extensive study of terminal education.

New Jersey Lunch Conference

A diorama prepared by the New Jersey State W.P.A. showing gardening for school lunches, canning for school lunches and serving of school lunches was exhibited at the New Jersey School Lunch Conference held September 27 at the New Jersey College for Women, New Brunswick. Other exhibits included trays of food illustrating the daily needs of the school child; suggestions for carried lunches; inexpensive plate lunches; good and poor plate lunches at moderate and low cost, and A, B, C lunches, with charts showing the nutritive value of each.

General topics covered at the session included "The Rôle of the School Lunch in the Educational Program," "Standards for the School Lunch" and "Problems in the Administration of the School Lunch."

Nutritional standards and serving standards were discussed, respectively, by Harriet Stone, supervisor of nutrition, Newark board of education, and Alice W. Burtis, chairman, Burlington County Parent-Teachers, Mount Holly, N. J. Louis Kaser, superintendent of Burlington County public schools, talked on problems in the administration of the school lunch.

RURAL SCHOOLS

Rural Nutrition Program Begun

Nutrition centers financed by Rural Electrification Administration loans from power cooperatives to school districts are to be set up in some 20,000 rural school districts to enable them to participate more fully in the nationwide nutrition program.

Public school officials in areas that obtain electric service from R.E.A. financed systems will receive invitations to serve on committees to establish nutrition centers in their communities.

"R.E.A.-serviced communities, with the rural schools playing an important part, furnish a center for the development of the rural nutrition education program," commented Harry Slattery, R.E.A. administrator, in launching the program for financing the centers.

The kind of equipment appropriate for a particular school will depend on the number of pupils, the grades included, available space and the ability of the community to repay the cost within a reasonable time. Basic equipment for a moderate sized school includes a refrigerator, pressure water system, electric range, dehydrator and grinding mill.

TRANSPORTATION

Examinations Are Stringent

Highest grade in the Illinois school bus drivers' examinations, participated in by 1600 drivers, was made by Oscar Wilson, who serves the East Peoria Community High School, East Peoria, Ill. This examination is said to be more rigid than that conducted by any state.

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Because Seal-O-San penetrates deeper . . . fills all cracks . . . and covers the floor with a *tougher* seal, it keeps dirt from piercing the surface and getting a foothold. That's why a Seal-O-San finish looks clean—*remains clean longer.*

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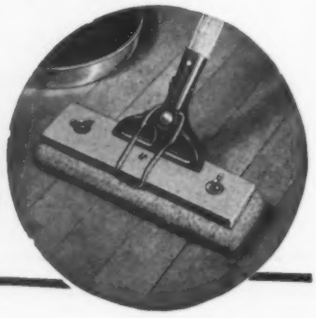

ADMINISTRATION

Textbook Policy Revised

Revising its former policy of purchasing textbooks for the public schools through so-called "secret committees," the board of education of Kansas City, Mo., recently announced that the method of purchasing textbooks would be as follows:

"With the approval of the principal of the school, representatives of publishing companies may call upon teachers in the school building during vacant periods or before or after school hours.

"When textbook committees are appointed, representatives of publishing companies shall be notified of the names of members and of the schools to which they are assigned.

"Representatives of publishing companies shall be notified if it is desired by any textbook committee that representatives shall appear before the committee as a whole.

"As a general practice, before any textbook committee begins its evaluation of text samples, it shall submit to publishing companies a set of standards by which all sample texts in the subject are to be evaluated."

Defense Stamp Purchases

Pupils of New York City schools can purchase United States defense stamps or bonds but no pressure will be put upon them to do so nor will the amount of such purchases in any school be made public, principals have been advised by the New York City board of education. The defense stamps and bonds can be purchased in schools that operate a school bank through cooperation with the mutual savings bank that now acts as depository for school savings. When no school bank is in operation, the principal can apply to the nearest bank for cooperation in the matter of purchasing defense savings stamps.

School Events Taxed

Any school event on which admission is charged is now subject to federal tax. An admissions tax of 1 cent for each 10 cents charged, including admission by season ticket or subscription, must be collected. There is an exemption for children under 12 only if the amount paid is less than 10 cents. Stubs of all tickets collected for admission must be retained for federal audit. Returns from all admissions to school events occurring in October must be filed before November 30 with the collector of internal revenue for the district. Report blanks may be obtained from him. Failure to report means a fine or possible imprisonment.

". . . immediate usefulness in the Defense Program"
says Mrs. Adria C. Beaver, Vice-President, Washington School for Secretaries, (Washington, D. C.)

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EDISON
VOICEWRITER
Ediphone

Defense worker Jeanne Patterson — who, like many other graduates of the Washington School for Secretaries, is doing her bit in the Nation's Capital.

To Survey Louisiana Schools

A survey of elementary and secondary schools for the state of Louisiana, headed by Supt. Carleton Washburne of Winnetka, Ill., has been inaugurated by the Louisiana Educational Survey Commission. The survey will be handled under three main divisions: (1) Community self-surveys will be made in representative parishes to discover the objectives each community wishes its schools to attain; (2) the survey will seek the best practices in the state in regard to curriculums, guidance, teacher education and administration, and (3) studies will be made of state administration and of important facts bearing on educational problems.

Sick Leave Increased

The five day sick leave now granted to teachers in the Detroit public schools has been increased to six days for the 1941-42 school year. The additional leave was provided for in the school budget, which was increased by $555,000. Non-teaching employes who have been employed by the board of education for one year will be granted five days' sick leave without loss of salary.

Seven Problems for Educators

American educators will face seven major educational problems after the current war has ceased, it was stated recently by Dr. E. George Payne, dean of the school of education, New York University, in his annual report to Chancellor Harry Woodburn Chase. The problems listed by Dean Payne include extended school periods; democratic participation in the educational process; adult education; vocational internships; preschool education; personality development, and educational planning.

"The war struggle, whatever the outcome of the battle, will inevitably leave whole peoples desolate, in poverty and want and completely disillusioned," Dean Payne asserted. "In the hopelessness that will follow it is a question of how democracy will survive and offer to the future a way out of interminable conflicts and misunderstandings that have beset past civilizations. Of one thing we can be quite sure, and that is that education will have to play a more significant part than it has in the past."

The program for postwar reconstruction of a new democratic order will require cooperative study, experimentation and research by those most responsible for the education of the personnel of our educational institutions of all kinds, Doctor Payne concluded.

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Coming Meetings

Nov. 6-7—Arkansas Education Association, Senior High School, Little Rock.
Nov. 6-8—Conference of Food Service Directors, New York City.
Nov. 6-8—Iowa State Teachers Association, Des Moines.
Nov. 7-8—Kansas State Teachers Association, Topeka, Salina, Wichita, Dodge City, Pittsburg, Hays.
Nov. 7-9—New Jersey Education Association, Atlantic City.
Nov. 10-13—National Council on Schoolhouse Construction, Cavalier Hotel, Virginia Beach, Va.
Nov. 13-15—Arizona Education Association, Phoenix.
Nov. 16-19—Louisiana Teachers Association, Municipal Auditorium, New Orleans.
Nov. 18-21—Virginia Education Association, Richmond.
Nov. 20-22—National Council for the Social Studies, Indianapolis.
Nov. 20-22—Texas State Teachers Association, Houston.
Nov. 24-25—New York State Teachers Association, Hotel Statler, Buffalo.
Nov. 26-29—Missouri State Teachers Association, St. Louis.
Nov. 28-29—International Border Region Branch Conference, Progressive Education Association, East Lansing, Mich.
Dec. 10-13—American Vocational Association, Hotel Statler, Boston.
Dec. 29-31—Pennsylvania State Education Association, Harrisburg.
Dec. 29-31—Illinois Education Association, Chicago.
Feb. 20-21—National Advisory Council on School Building Problems, St. Francis Hotel, San Francisco.
Feb. 21-26—American Association of School Administrators, San Francisco.
Feb. 26-28—American Association of Junior Colleges, Los Angeles.
April 8-10—Inland Empire Education Association, Spokane, Wash.
April 17-18—Idaho Education Association, Boise High School, Boise.

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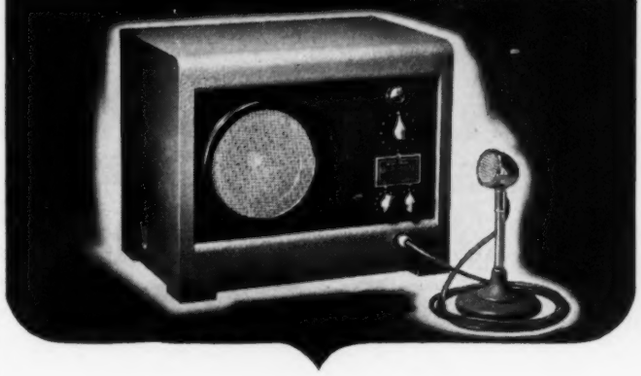

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Your voice is reproduced tone for tone, pitch for pitch with amazingly natural fidelity. There's no mechanical distortion to cover up the pupil's speech imperfections or peculiarities that need correction.

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INSTRUCTION

Mobile Laboratories for Defense

Laboratories on wheels are rolling over the highways of Pennsylvania to serve trainees in the growing army of defense technicians. Because many communities in which the Pennsylvania State College is operating courses in the engineering, science and management defense training program have no suitable laboratories, the college's extension service has provided trucks to carry equipment that can be quickly set up in any classroom. The mobile units are equipped to demonstrate three dozen chemical experiments and 23 practical experiments in magnetism and static electricity.

Grade School Education Analyzed

The tendency in grade schools to discard the old method of organizing classes around "subjects" in favor of the newer method of basing them on "practical problems" should be carefully studied by educators, it was stated by Dr. Frank N. Freeman, dean of the school of education, University of California, addressing the fiftieth anniversary symposium of the University of Chicago.

Doctor Freeman recommended four research projects that might be undertaken in order to determine whether the new doctrine of teaching is superior to the established method. These are:

1. A comparison of college records of two groups of students, one trained under the old method and the other under the new.
2. Direct measurement in the grade schools of pupils under both systems to determine their knowledge, skill and personality developments.
3. Studies to determine whether the children are stimulated more by the "practical problem" approach or by courses organized systematically around the traditional subjects.
4. Studies to determine the extent to which people in everyday life learn only in a "piecemeal" fashion as problems present themselves.

Forum on Women's Education

"The American Woman and Her Responsibilities" will be analyzed at a forum to be held at Stephens College, November 6 to 8. The forum will seek to clarify the educational needs of American women in order to equip them properly for their responsibilities of citizenship in a democracy.

"To be adequate, an educational program for women must include courses on marriage and the family, child raising and psychology, home management and practical economics, and community service and responsibility," it was stated by President James Madison Wood, in announcing the forum.

School for P.-T.A. Leaders

Parent-teacher leaders in Kentucky were invited to attend a school of instruction at the University of Kentucky on October 1. The day's "schooling" opened with an address of welcome from Dr. Herman Lee Donovan,, president of the university, and a discussion by John W. Brooker, state superintendent of public instruction, of the "Constitutional Amendment." Six other discussions were held during the morning meeting, with the general assembly divided into sectional meetings. The final discussion was devoted to P.-T.A. problems and included a question hour.

Study Manuscript Writing

First graders in 100 Cincinnati schools will learn manuscript writing this year. Workshop study groups will be organized under the leadership of Dr. Althea Beery, supervisor of the language arts, for teachers who wish to acquire facility in this form of writing and to exchange plans for teaching manuscript writing.

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Imagine *that* . . . and you have an excellent mental picture of the just-published Reality Political-Physical maps, for every continental map in this new series is drawn on the *same scale of miles* . . . this for the first time gives you a set of maps on which sizes of continents and oceans may be exactly compared, just as though you had in fact "peeled" every map from a 6½ foot globe.

But the *same scale of miles* is only one of the outstanding teaching features of this new set of maps designed and edited by Miss Edith Putnam Parker of the University of Chicago. May we mail you our catalog so you'll have the whole story? No cost or obligation, of course; address Dept. N-1141.

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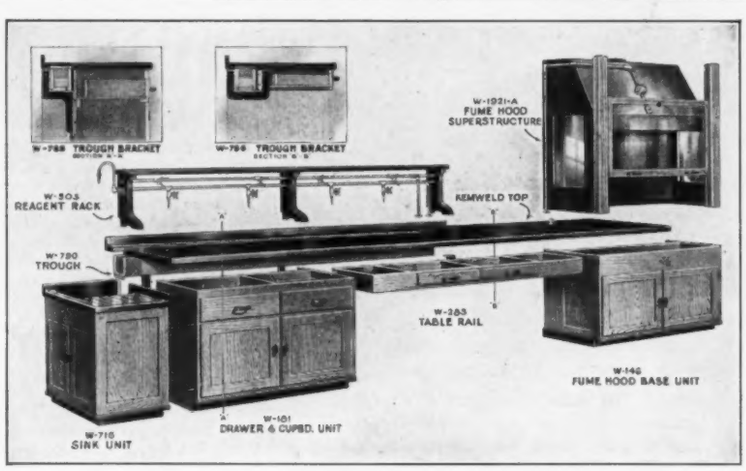

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PUBLICATIONS

"America's Free Schools"

A plea that teachers be allowed the maximum of responsibility in deciding what shall and what shall not be taught in the public schools is voiced in the pamphlet, "America's Free Schools," recently published by the Council for Democracy.

"They are best fitted for this direction of activities because their social attitudes have been demonstrated to lie midway between the radical and the conservative extremes," it is declared.

The pamphlet also warns against the efforts of pressure groups to gain control of the schools and against economy drives that threaten the American school system. "America's Free Schools" is one of a series of "Democracy in Action" pamphlets that are available from the council headquarters in New York City.

Yearbook on Language Arts

"Language Arts in Elementary Schools" was chosen as the subject of the recently published twentieth yearbook of the Department of Elementary School Principals because of the apparent need for material in this curricular area. Emphasis in the book has been placed upon giving children experience in the use of language skills in a wide variety of life-like situations. The eight chapters in the book are devoted to (1) the nature and scope of the language arts program, (2) oral language, (3) written language, (4) reading, (5) handwriting, (6) spelling, (7) activities involving a variety of language arts and (8) general administrative and supervisory practices.

Education of Rural Teachers

"The Education of Rural Teachers in Service" is the title of the introductory bulletin in a new series of leaflets on rural education published by the Committee on Rural Education. The leaflets will deal with persistent problems of schools in rural areas.

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NATIONAL DEFENSE

Protection for School Pupils

Plans were formulated to protect the lives of elementary and secondary school pupils in the event of war by a committee of public, parochial and private school administrators at a meeting October 1 under the auspices of the Office of Civilian Defense.

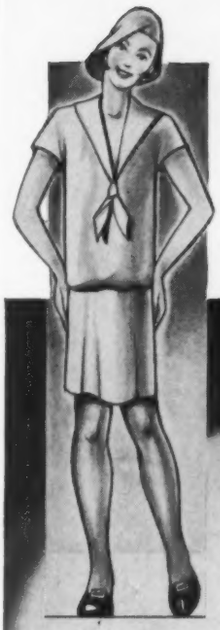
"Children and those in charge of them must acquire new habits and abilities necessary in this new kind of emergency; old fire drills are not enough," it was pointed out in the official statement of the committee.

Educational Forums for Morale

A nationwide program of public discussion as a means of encouraging popular understanding of problems arising from the present world crisis is to be inaugurated by Paul V. McNutt, Federal Security Administrator, at the request of President Roosevelt.

Mr. McNutt has announced that he is calling on John W. Studebaker, U. S. commissioner of education, to take immediate steps to adapt the experience and organization of the Office of Education in launching the program proposed by the President. He urges that schools and colleges throughout the country cooperate in promoting educational forums and public discussion as a means of building civilian morale.

"The responsibility of promoting democratic discussion falls on our traditional institutions which we have set up for enlightenment—our schools and colleges," Mr. McNutt asserted. "I am sure that our institutions of learning will respond wholeheartedly to the request of the President."



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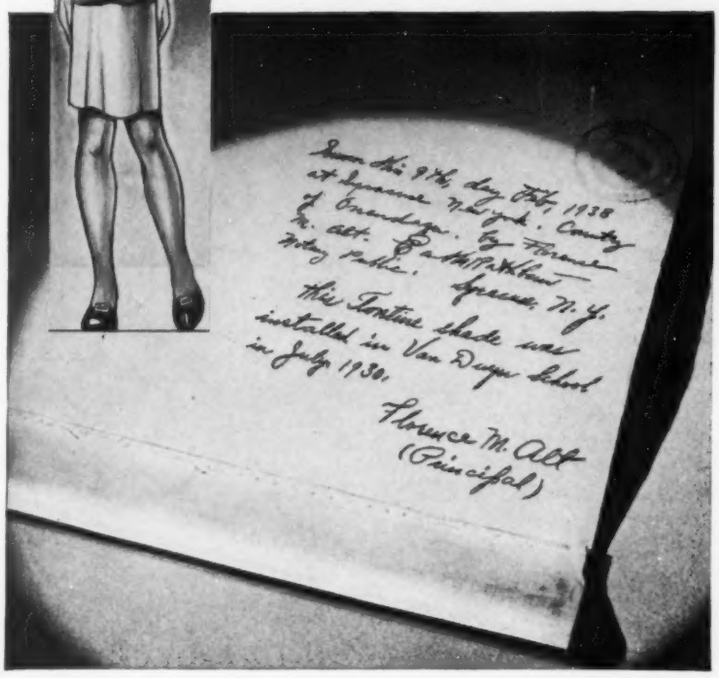

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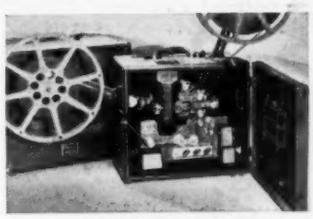

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NAMES IN NEWS

Superintendents

WILLIAM WAXMUTH, superintendent of schools of district 214, Morton, Wash., has been called to active duty in the Army with the rank of captain in the field artillery reserves.

MAHLON A. POVENMIRE has been named successor to ORVILLE E. HILL as superintendent of schools at Galion, Ohio. Mr. Povenmire was principal of the senior high school at Coshocton, Ohio, for four years and has been succeeded by A. B. GORSUCH.

DON E. ANDERSON has assumed the superintendency of schools at Potrero Heights, Calif., to fill the vacancy created by the resignation of BEULAH BARTLETT.

SUPT. A. D. GRAVES of San Bernardino, Calif., has resigned that position to accept an executive post with the San Francisco school system.

TRAVIS A. ELLIOTT resigned recently as superintendent of schools at New Boston, Ark., to join the quartermaster's department of the Red River Ordnance Depot, Texarkana, Ark.

WILLIAM T. MCKERNAN has been elected superintendent of schools of the first district of Sullivan County, New York, to succeed ALFRED J. WIESMAN. Mr. McKernan's post as principal of Woodridge High School, Woodridge, N. Y., has been filled by LOUIS BLUMBERG.

WILLARD B. SPALDING has resigned as superintendent of schools at Belmont, Mass., to accept the superintendency of schools at Passaic, N. J. MARK R. SHIBLES has been named acting superintendent to succeed Mr. Spalding whose resignation will become effective November 1.

RAY S. SMITH, superintendent of schools of Jefferson, Wis., for the last ten years, has been appointed director of training at Whitewater State Teachers College, Whitewater, Wis. As successor to Mr. Smith the Jefferson board of education selected DONALD LEE, former high school teacher.

ARTHUR DONDINEAU, supervising director of special education and special clinics, Detroit, has been promoted to the position of assistant superintendent of schools.

FRANK CODY, superintendent of schools, Detroit, was named president of the Michigan state board of education at the annual meeting of the board. MARY F. FARNSWORTH, assistant principal of Cooley High School, Detroit, was named vice president.

H. A. WALLACE is the newly elected superintendent of schools, Flomot, Tex.

C. C. DITTMER is the new superintendent of public schools, Welcome, Minn.

E. G. BJORNSTAD, superintendent of schools at Seibert, Colo., for the last six years, is the newly elected superintendent at Motley, Minn.

BEN O. GRANT has assumed the superintendency of schools of Brady, Tex. He was formerly a teacher in the school system at Evans, Tex.

J. E. BURGESS, former principal of Avondale High School, Avondale, Ga., has been elected superintendent of the Avondale school district.

County Superintendents

WILL STEPHENSON has been named county superintendent of schools, Hamilton County, Illinois, to fill the unexpired term of M. L. HUNT.

ROLAND BUTCHER, former principal of Sand Fork High School, Sand Fork, W. Va., has been appointed assistant county school superintendent, Gilmer County, West Virginia.

Principals

D. A. HAMILTON has been elected principal of Fayette County High School for Negroes, Somerville, Tenn.

RAYMOND C. WASS, principal of Hanover High School, Hanover, Mass., has resigned to accept the superintendency of schools at Hamilton, Mass.

CURRICULUM INTEGRATED SOUND FILMS

SEVENTEEN ADDITIONAL ERPI SUBJECTS FOR FALL RELEASE

Crosses (x) Indicate Film-Subject Correlations	Social Studies	History	Geography	Health	Home Economics	Sociology	Economics	General Science	Biology	Zoology	Physiology	Physics	Adult Education
SOCIAL STUDIES													
Westward Movement	x	x	x			x							x
Flatboat Pioneers	x	x	x		x	x	x						x
Pioneers of the Plains	x	x	x		x	x	x						x
Old New Orleans	x	x	x		x	x	x						x
Growth of Cities	x		x			x	x						x
People of Alaska	x		x		x		x						x
Eskimo Children	x		x		x								x
Communication	x	x						x				x	x
City's Health	x			x	x	x		x	x				x
BIOLOGICAL SCIENCES													
Pneumonia				x	x			x	x		x		x
Eyes and Their Care				x				x	x		x		x
Home Nursing				x	x								x
Posture and Exercise				x	x			x	x		x		x
The Sunfish								x	x	x			x
The Horse								x	x	x			x
PHYSICAL SCIENCES													
The Weather			x					x				x	x
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VERNON G. MAYS, principal of Waltonville Community High School, Waltonville, Ill., has resigned. He will be succeeded by CHARLES HAGGARD of Zeigler, Ill.

GRAHAM R. MILLER, supervisor of vocational education and defense training in Denver public schools, has been named head of the Emily Griffith Opportunity School, Denver.

QUENTIN JESTER has been named principal of the Bluffs Grade School, Bluffs, Ill.

CLARENCE HALE will be principal of the Falling Water School at Chattanooga, Tenn., for the coming year.

G. HAROLD SCHOFSTAL has been elected principal of Minersville High School, Minersville, Pa., to succeed EDWARD A. BRADY who was recently appointed superintendent of schools.

HERBERT VANNEY has been selected as principal of Stewart High School, Houston County, Tennessee.

WARREN E. HERTENSTEIN has assumed his duties as principal of Watkins Glen High School, Watkins Glen, N. Y.

LEONARD W. JOLL, principal of Gilbert F. Pratt School, Pomfret, Conn., has been named principal of Plantsville School, Plantsville, Conn.

LOREN EARLY has been promoted to the position of principal of the Salem Junior High School, Salem, Ohio.

MARTIN W. ESSEX, superintendent of schools at Middleport, Ohio, for the last five years, has accepted the position of principal of East Liverpool High School, East Liverpool, Ohio.

F. M. GOLDSBOROUGH has resigned the position of principal of Chesterton High School, Chesterton, Ind., which he has held for thirty-one years. He will be succeeded by LEE L. EVE.

RUEL E. TUCKER, headmaster of Brockton High School, Brockton, Mass., resigned recently to accept the principalship of the Junior-Senior High School at Great Neck, L. I.

JACK DAVIS, who has served as principal of the Konawa High School, Konawa, Okla., has been appointed superintendent of schools.

JOHN WESLEY GATES, junior high school principal of Topeka, Kan., has been named principal of the Senior High School, Springfield, Mo., to replace L. A. VAN DYKE who was elected early in the summer but resigned before assuming his new position to join the faculty of the University of Iowa.

NORMAN J. HOLLY, commercial teacher of Pittsfield High School, Pittsfield, Mass., has been chosen to head the Pomeroy Junior High School, Pittsfield, Mass.

CLARENCE CUMMINGS is the new principal of the high school at Marlboro, N. H. He received his master's degree in education at Cornell this year and has been headmaster of various academies and high schools in New Hampshire and Maine.

ROBERT HAYDEN KROEPSCH of Woburn, Mass., has succeeded WILLIAM C. GAIGE as principal of the high school at Pembroke, Mass. Mr. Gaige is now principal of the senior high school at Wellesley, Mass.

LAURENCE A. FOGG of Vineyard Haven, Mass., is the new principal of Rogers School, Fairhaven, Mass. CLARENCE E. MCGUIRE, formerly of Rogers School, has been transferred to the principalship of the Job C. Tripp and Edmund Anthony Jr. schools, Fairhaven.

PAUL J. SWANK, for seven years superintendent of schools, Boone County, Indiana, has returned to the principalship of Dover High School, Dover, Ind.

H. A. HELMS, former principal of Central Junior High School, Greensboro, N. C., is the new principal of Needham B. Broughton High School, Raleigh, N. C. MARVIN D. TEAGUE, city schools business manager, will replace Mr. Helms as head of the school.

PAUL H. VAN NESS, former principal at Scotch Plains, N. Y., is the newly installed principal of the Ho-Ho-Kus Public School, Ho-Ho-Kus, N. J. RICHARD T. BECK, whom he succeeds, has taken a position in the Jersey City schools.

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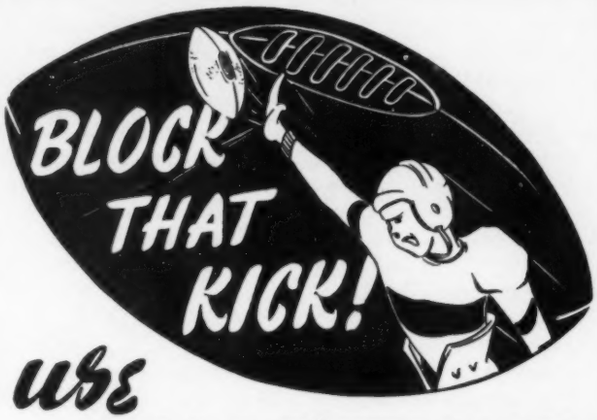

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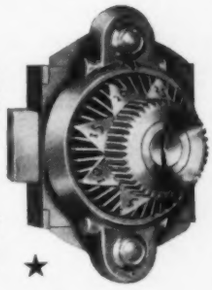

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OLIN B. SMITH, former high school principal at Niles, Ohio, has assumed his duties as head of the Portsmouth High School, Portsmouth, Ohio.

SISTER M. MADELEINE, S.N.D., has been named principal of Notre Dame Academy, Toledo, Ohio, succeeding SISTER M. GODFRY, S.N.D., who has been at the academy for seventeen years.

WALDRO J. KINDIG, principal of Mt. Holly High School, Mt. Holly, N. J., for the last eight years, has resigned to accept a similar position at the senior high school at Brockton, Mass. He was succeeded at Mt. Holly by MILFORD FRANKS.

Private Schools

DR. DAVID B. HENRY, executive vice president of Wayne University, has been elected to the board of trustees of the Cranbrook Institute of Science, Bloomfield Hills, Mich.

In the Colleges

LAUREN A. VAN DYKE, director of high school supervision in the Missouri State Department of Education, has joined the faculty of the University of Iowa as assistant professor of education and director of University High School. He succeeds HARRY K. NEWBURN, who was made dean of the college of liberal arts on September 1.

DR. WILLIS F. PRATT, superintendent of the public schools of Erie County, Pennsylvania, has become president of Mansfield State Teachers College, Mansfield, Pa.

EARL C. MACARTHUR, head of the English department of Peddie School, Hightstown, N. J., has been named first president of the newly chartered Paul Smith College of Arts and Sciences at Malone, N. Y.

DR. ALTON W. BIRDWELL has retired as head of Stephen F. Austin State Teachers College, Nacogdoches, Tex. Doctor Birdwell has been president of the college since its founding in 1923.

DEAN ERNEST O. MELBY, head of the department of education, Northwestern University, has announced his acceptance of the presidency of the University of Montana. Dean Melby has been on the Northwestern faculty since 1928.

DR. HARRY H. CLARK, who resigned in July after ten years of service as superintendent of schools, Knoxville, Tenn., has been appointed professor of extension of the University of South Carolina.

Miscellaneous

WALTER D. COCKING, former dean of the college of education, University of Georgia, has been appointed consultant in program planning by PAUL V. MCNUTT, federal security administrator.

FRANCIS R. SCHERER, superintendent of school buildings, Rochester, N. Y., who holds a reserve commission of lieutenant-colonel in the ordnance division of the Army, has been assigned to active duty in Washington as chief of the plant group, engineering branch of the construction division of the quartermaster corps. Colonel Scherer has been active in the field of school planning and operation and is an editorial consultant of The NATION'S SCHOOLS.

Deaths

GEORGE B. HURSH, superintendent of buildings and grounds at the Teachers College, Lock Haven, Pa., for forty-three years, died recently.

DR. W. FOWLER BUCKE, for seventeen years head of the department of education and director of teacher training at Geneseo Normal School, Geneseo, N. Y., died after an illness of several months.

DR. THOMAS HARDY TALIAFERRO, the first president of the University of Florida, and until last April dean of the faculty of the University of Maryland, died September 25 at the age of 70.

EUGENE M. PHILLIPS, 74, died recently following a heart attack. Mr. Phillips was state commissioner of education of Minnesota in 1933 and 1934 and had been affiliated with the state department from 1911 until his retirement in 1934.

YOUR SCHOOL WILL USE A NEW KIND OF RECORDING DISC THIS YEAR!

The aluminum base recording blanks you have used in the past will not be available this year because the entire aluminum supply is being used for national defense.

Here is the information you need to order the new Presto recording blanks and needles for your speech and music departments.

PRESTO GLASS BASE DISC: The highest quality disc now made, smoother, more rigid than the metal base discs, acknowledged by recording engineers to be the finest disc ever developed for sound recording. Recommended for all of your important recording, particularly transcriptions to be broadcast by radio stations. Overall thickness (.104"). Made in the following sizes:—

TYPE	SIZE	LIST PRICE
912-A	12"	$1.25
913-A	13½"	1.50
916-A	16"	2.50

NOTE:—The 12" and 13½" discs are packed 20 to a case, the 16" 15 to a case.

PRESTO STEEL BASE DISC: A new disc equal in quality to the Presto Orange Seal disc which was widely used for educational recordings. Gives excellent reproduction of both speech and music. Overall thickness (.036"). Made in the following sizes:—

TYPE	SIZE	LIST PRICE) (Box of 10
307-A	7"	$4.50
308-A	8"	5.50
310-A	10"	8.00
312-A	12"	10.00

PRESTO MONOGRAM DISC: An economical composition base disc ideal for test recordings of speech or music. Coated with the same compound as the Presto glass disc, assuring long playing life and faithful reproduction. Used extensively in schools and recording studios. Overall thickness (.050"). Made in the following sizes:

TYPE	SIZE	LIST PRICE (Box of 10)
706-A	6"	$2.00
708-A	8"	3.50
710-A	10"	5.00
712-A	12"	7.00
716-A	16"	15.00

PRESTO SAPPHIRE CUTTING NEEDLES: Make as many as 300 perfect 1 minute recordings on one sharpening. Outlasts several dozen steel needles. Saves changing needles while recording groups of students. List price per needle, $6.00. Cost of resharpening, $2.50.

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While Murdock Outdoor Bubble Fonts are still available, specify the Murdock AIR LOCK Fountain if you desire to provide the children in your care with the very latest safeguards—the most sanitary outdoor fountain manufactured.

This fountain is the only air-locked outdoor drinking fountain obtainable.

Polluted water from a clogged sewer cannot get beyond the air lock to contaminate the fresh water supply because the air lock is a modern utilization of an Old, Well-Known Principle of Hydraulics.

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ADVERTISING PAGES REMOVED

The Bookshelf

General

JUAN: SON OF THE FISHERMAN. *By Isabel de Palencia. New York: Longmans, Green and Company,* 1941. *Pp.* v+207. $1.75.

AMERICA PREPARES FOR TOMORROW. The *Story of Our Total Defense Effort. By William Dow Boutwell and Others. New York: Harper & Brothers,* 1941. *Pp.* xv+612. *School Edition,* $2.65; *Trade Edition,* $3.50.

TEACHING THE SLOW LEARNER. *By W. B. Featherstone. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. *Pp.* viii+$0.75.

ADVENTURES IN THE RECONSTRUCTION OF EDUCATION. *Edited by A. J. Klein and Others. Columbus, Ohio: Ohio State University, College of Education,* 1941. *Pp.* viii+290.

HAWK OF HAWK CLAN. *By Margaret Alison Johansen. New York: Longmans, Green and Company,* 1941. *Pp.* viii+280. $2.

WHAT OUR SCHOOLS ARE TEACHING. *(Special Reference to Science, Social Studies and Industrial Arts.) By H. B. Bruner, H. M. Evans, Cecil R. Hutchcroft, C. Maurice Wieting and Hugh B. Wood. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. *Pp.* xii+225. $3.

THE AMERICAN CITIZENS HANDBOOK. *Arranged by Joy Elmer Morgan. Washington, D. C.: National Education Association,* 1941. *Pp.* 366.

TEACHER-LIBRARIAN'S HANDBOOK. *By Mary Peacock Douglas. Chicago: American Library Association,* 1941. *Pp.* xviii+136. $1.90.

THE SATURDAY LETTERS. *By Raymond E. Manchester. Cuyahoga Falls, Ohio: F. W. Orth Company,* 1941. *Pp.* viii+230. $1.50.

SINGING SISTERS. *By Laura Long. New York: Longmans, Green and Company,* 1941. *Pp.* vii+260. $2.

"SCHOOL SUPPORT IN INDIANA." *Research Service Bulletin, Indiana State Teachers Association,* 1941. *Pp.* vii+82. $0.25 *(Paper cover).*

PROGRAM OF REORGANIZATION FOR THE PUBLIC SECONDARY SCHOOLS OF PRINCE GEORGE'S COUNTY, MARYLAND. *By Survey Committee, Arnold E. Joyal, Chairman. College Park, Md.: University of Maryland,* 1941. *Pp.* 128.

PROBLEMS OF AMERICAN DEMOCRACY. *Audio-Visual and Teaching Aids. By John J. Rellahan. Montclair, N. J.: New Jersey State Teachers College,* 1941. *Pp.* 27. $0.50 *(Paper cover).*

Textual

ADVENTURES OF ANNABELLE. *By Jerry Hardy. Washington, D. C.: Highway Education Board. Pp.* 16. *Single copies free on request. In quantity,* 5 *cents per copy (Paper cover).*

PERSONAL HYGIENE APPLIED. *By Jesse F. Williams. Philadelphia: W. B. Saunders Company,* 1941. *Pp.* xvi+529. $2.50.

PRACTICE STEPS IN ENGLISH, *Books One, Two, Three and Four. By Frederick H. Bair, Elma A. Neal, Inez Foster and Ollie P. Storm. New York: The Macmillan Company,* 1941. $0.32 *each.*

TEST IT YOURSELF! *Chemistry Experiments With Consumer Applications. By Tuleen, Muehl and Porter. Chicago: Scott, Foresman and Company,* 1941. *Pp.* 290. $0.96, *list. Teacher's Edition,* $1.08, *list.*

AMERICAN ECONOMIC PROBLEMS. *By S. Howard Patterson, A. W. S. Little and H. R. Burch. New York: The Macmillan Company,* 1941. *Pp.* viii+632. $1.96.

PAGE FENCE

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What Public Schools Prefer in Soaps and Soap Dispensers

To ascertain current practice in public schools in regard to soap and soap dispensers a questionnaire was mailed to 250 superintendents of schools during the month of September.

In order to get the proper geographic distribution, the number sent to each state was proportionate to the size of the state. The 36.7 per cent return received is regarded as exceedingly good.

Returns give wide geographic representation as well as excellent balance between large, medium sized and small school systems. The following tabulations, therefore, apparently give an accurate picture of present conditions and preferences in regard to soap and soap dispensers in the school field.

1. What type of soap service does your school system supply for pupil handwashing?

Liquid soap dispensers	57
Liquid and flaked soap dispensers	11
Flaked or granulated soap dispensers	7
None	7
Bar soap	3
Bar soap and liquid soap dispensers	3
Bar, liquid and flaked soap dispensers	2
Bar and flaked soap dispensers	2

COMMENTS: (1) liquid for general use and flaked for use in shops and laboratories; (2) liquid soap but changing to flaked; (3) granulated soap for teachers' rest rooms and nonpupil use; (4) bar soap for shower rooms and flaked for other places.

2. What are the advantages and disadvantages of your method?

ADVANTAGES OF BAR SOAP
No fixtures needed
Wastes less soap; better soap

DISADVANTAGES OF BAR SOAP
Children waste great deal
Messy; harder to keep supplied
Not sanitary
Bar soap containers break too easily

ADVANTAGES OF LIQUID SOAP DISPENSERS
Economical and convenient (2)
Less soap used (3)
More pleasing for general use

ADVANTAGES OF LIQUID SOAP DISPENSERS—CONT'D
Can be used with one reservoir for a number of dispensers
Trouble free; low upkeep
Prevent waste; more easily dispensed than flakes
Less expensive; easier to dispense
Less storage space; little waste
Cleaner; more economical
Convenient
More economical for all considerations
Economical and serviceable
Cheap as any and cannot be thrown away
Economical; can thin out the soap as much as needed
Sanitary and economical
Easier for small children; economical
Efficient and not expensive
Easily dispensed
Cheaper; no mess; no waste
Cheaper
Easy to fill containers and keep supply in fixture
Cannot be carried away
Children like it; cheaper in long run
Eliminates criticism of parents who object to pupils' using bar soap
Economical
Cleanest; cheapest
Inexpensive
Very convenient
Liquid soap in individual and tank system very satisfactory

DISADVANTAGES OF LIQUID SOAP DISPENSERS
Pressure tank in basement does not force soap beyond the first wash basin
Containers easily broken
Dispensers must be replaced frequently to avoid waste through breakage; glass bowls subject to breakage
More expensive
Sometimes wasteful
Fixtures sometimes clog
Less economical

ADVANTAGES OF FLAKED OR GRANULATED SOAP DISPENSERS
Best for cutting grease and paint
Less waste; more economical; dispensers unbreakable
Preferred for teachers' rooms

ADVANTAGES OF FLAKED OR GRANULATED SOAP DISPENSERS—CONT'D
Advantage in cost; less waste
Economical; less messy
Less expensive; cleaner
Cheaper
Saving of soap
More economical; better quality soap
Easy to handle
Savings effected

DISADVANTAGES OF FLAKED OR GRANULATED SOAP DISPENSERS
Not successful in our school
Difficult to dispense soap

3. Do you have a standard specification for handwashing soap?

No	56
Yes	28
No answer	8

4. What is the specification you have?

40% contains ingredients such as coconut oil, potash and distilled water in proper proportions
40% soap of edible coconut oil; potash saponification
40% glycerine base
40% coconut base
40% solution equal to Palmolive
40% soap, which we dilute 3 to 1
40% try samples with water supplied the school
40% concentration and bar pure olive soap
42% concentrated, vegetable base
42-45% concentrated soap made from No. 1 quality edible cochin coconut oil
15% anhydrous to meet Fed. Spec. PS 618
18% anhydrous soap content; to be made from pure odorless coconut oil saponified with caustic potash, with a maximum of 0.3% free alkali
17-22% anhydrous soap content; all vegetable oils
42% anhydrous cochin coconut oil soap, government specifications
Jelly hand soap base. Coconut oil and glycerin
Good quality of coconut oil soap
Not too heavy Sp. c. g.
Federal specification PS 618-liquid; PS 616-white floating toilet soap
Bought from same firm for years on standard materials

5. Are soap purchases made entirely on the basis of lowest bidder meeting the specifications?

Yes 16
No 66
No answer 9
State specifications 1

6. If not, what are the other factors?

Quality only (6)
Quality and contract
Quality; lack of chapping
Quality, as determined by use
Quality and service and freight rates
Quality as shown by samples
Purchase a good grade and concentration of liquid soap from a reliable firm
Buy from reputable concerns only
Ease of securing, transportation costs, availability
Selections based on past experiences
Purchased through county purchasing agent who probably takes low bid
Placed on bids but quality important; may or may not be lowest bidder
Purchase from state school supply companies and try to balance off the business each year. All companies have about the same quality of soap
Local dealer may horn in
Satisfactory service
Experience with a satisfactory product
Good brand, purchased locally
Reputation of company
Use a soap that experience has found satisfactory
Concentration makes a difference
Pick soap that has given satisfaction
Purchase locally
Get a soap that will lather in the water here
Reputation of firm and type of service rendered
Certain standard soap from certain firm
Selection of satisfactory product
Select soap we feel best, regardless of price
Individual schools buy from local firms with local money
Local purchase from lowest bidder
Best for the price
Buy on basis of specification, past experience and such tests as we may be able to give
Some concentrates are not conveniently packed for ease of handling; we use a No. 5 roll marked off into unit pounds; dilutions on concentrations are our own based upon experience
Efficiency and convenience in handling

Features of Dispensers School Users Find Most Important

Quality	Rating First	Second	Third	Fourth	Fifth	Sixth	Seventh
Appearance	4	6	12	13	7	10	9
Low first cost	1	2	6	2	10	11	19
Low upkeep	17	5	11	15	9	1	1
Ease of installation	..	..	2	8	13	17	13
Ease of refilling	1	15	8	13	8	7	1
Proof against tampering	18	23	7	3	3	2	2
Ruggedness	24	13	12	5	2	3	4

No answer 26

FACTORS TO BE CONSIDERED IN PURCHASING—CONT'D

Known product
Get estimates and then try soaps out
Purchase from reliable house at a fair price
Distance, past service
Local firm

7. Who is responsible for selecting brand of handwashing soap?

Superintendent 57
Superintendent, custodian 10
Superintendent, business manager 1
Custodian 6
Principal 4
Principal, custodian 2
Board member 1
Business manager 4
Superintendent of stores 1
Supply committee 1
No answer 5

8. If you use dispensers please number the following features in order of their importance to you.

See accompanying table for answers.

9. Do you have a standard specification for soap dispensers?

Yes 7
No 77
No answer 8

10. What is the specification you have?

Inverted glass bowl reservoir type
Two-shot system
Steel, four cornered box
Aluminum Soapitor dispenser
One that pumps soap from top; drip type wasteful
State contract
Must be able to dispense our type of soap

11. Are dispenser purchases made entirely on basis of lowest bidder meeting specifications?

Yes 9
No 71
No answer 12

12. If no, what are the other determining factors?

DETERMINING FACTORS IN BUYING DISPENSERS

County unit board
Quality (3)
Quality and service
Quality, service, freight rates
Best quality for money
Usually purchase from firms furnishing soap; under this plan the soap people service the dispensers
Permanent system
Select best for our needs
Must be adaptable to our needs
Placed on bids but quality important
Selected after trial
Satisfactory tests
Reputation of company
Satisfaction (2)
Must be high quality, tested merchandise
Suitability
Reputation of firm and type of service rendered
Replaced as needed from firm from which we buy soap
Consideration given local bidder
We buy a dispenser that rarely needs replacements other than an occasional glass container
Serviceability
Must be strong and tamperproof; must not permit easy waste of soap
Satisfaction on trial
Service and cost of soap
Service and upkeep
Distance and past service

General Comments. 1. "Inasmuch as our school serves only 175 to 190 pupils, we do not have a large problem in first costs or in upkeep. Our biggest problem is to help the pupils learn that waste of school supplies is a waste of their own money since their families are taxpayers."

2. "Pupils are not permitted to enter lunchroom without washing their hands. A teacher supervises and inspects the pupils."

3. "We use liquid soap dispensers and have found all our materials excellent in every detail. Pupils seem to appreciate our buying the best."

4. "Perhaps we have not given the soap question enough consideration. I shall be anxious to receive the conclusions drawn from your survey."

Three-Way Public Address

A "triple-threat" newcomer to the public address system field is Ampro Corporation's tri-purpose amplifier. The tri-purpose features of Model PA-3 are (1) public address system with separate preamplifiers for use with two of any type of microphone; (2) phonograph amplifier system with fader control for two turntables, and (3) projector amplifier system with provision for complete operation in conjunction with two projectors with small amplifiers or with two projectors without amplifiers. It is provided also with exciter lamp supply and photo-cell connections ready for use without rewiring.

Model PA-3 operates with microphones or phonographs or as an auxiliary amplifier with Ampro classroom projectors in various combinations, and provides adequate volume for audiences up to 10,000. In addition, the amplifier not only has provision for operation in conjunction with other amplifiers, the manufacturer states, but also is equipped for operation with any projector.—AMPRO CORPORATION, 2839 No. WESTERN AVE., CHICAGO, ILL.

• *When inquiring, refer to* **NS420**

Political-Physical Maps

"Reality" is the word for the new Weber-Costello political-physical maps that are especially designed to show the distribution of major natural and cultural features of the earth's surface.

The maps are so drawn that each one can be accurately compared to any other in the series. All man-made features, such as cities, boundary lines, railroads, canals and steamship routes, are shown in red. The maps are particularly easy to read, the manufacturer states, because only information that is important to teaching is included and they are not cluttered with reading material that is of no significance or that should be shown on some other type of map. The complete "Reality" series includes maps of North America, South America, Africa, Australia and the Western Pacific, Asia, the United States, Europe and the world.—WEBER-COSTELLO COMPANY, CHICAGO HEIGHTS, ILL.

• *When inquiring, refer to* **NS421**

Lethal Chamber for Rats

Rats electrocuted wholesale while you wait is the motto of the Rochester Automatic Trap Co., Inc. The lethal chamber consists of a wooden tunnel measuring 48 inches long, 21 inches wide and 15 inches high. It has no floor and is open at both ends. Midway along the side of the tunnel is an infra-red beam that shines on a photoelectric cell. When the rat breaks the beam the circuit is broken and trap doors at the ends of the tunnel are automatically shut.

The only immediate means of egress is a small ramp leading to a chamber above. When Brother Rat, hunting an exit, steps on the floor of this chamber he makes an electrical contact that drops the door behind him. Hence, the only route left open is a small passage leading to the six-stalled chamber. Directly in his path so that he must step on it is a switch plate that not only rises behind him to block any retreat but also sets in operation a release mechanism that opens the tunnel to entrap the next victim.

The rat meets his doom in one of the six stalls, all of which are charged with 110 volts; this amount of electricity is sufficient to kill but not to burn him. The death chamber is removable, like a drawer, so that the corpses can be emptied out without anyone's having to touch them. — ROCHESTER AUTOMATIC TRAP CO., INC., 278 CLINTON AVE., SO., ROCHESTER, N. Y.

• *When inquiring, refer to* **NS422**

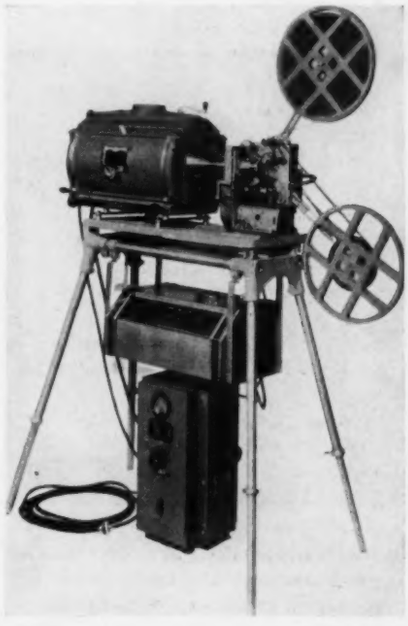
Playback Recorder

Sixty-two minutes of sound can be recorded on one side of a plastic disk by the CGS portable phonographic recording and playback instrument recently developed by Frank Rieber, Inc. The extended recording feature of the instrument enables teachers and pupils to study rehearsals at leisure and to maintain a continuous study of a pupil's progress in speech training, languages or dramatics. Both sides of a disk can be used and it can be filed like letters—more than 40 to one inch of filing space in a standard cabinet. The unit can be used on any 110 volt circuit and can be equipped to start automatically at the sound of the voice and stop at a given interval after speaking ceases.—FRANK RIEBER, INC., 11916 PICO BLVD., LOS ANGELES, CALIF.

• *When inquiring, refer to* **NS423**

Arc Lamp Projector

Designed especially to give heavy duty service and to fulfill a demand for a projector that will produce unusual brilliance of screen images in large auditoriums and outdoor areas is the latest addition to the Victor Animatograph line, the Model E high intensity 16 mm. arc lamp projector. The complete unit includes a projector, sound unit, two speakers, arc lamp, rectifier and projector stand. The sound lens is said to



have an unusual depth of focus to ensure maximum quality with color film, as well as with black and white.—VICTOR ANIMATOGRAPH CORPORATION, DAVENPORT, IOWA.

• *When inquiring, refer to* **NS424**

Emergency Light Units

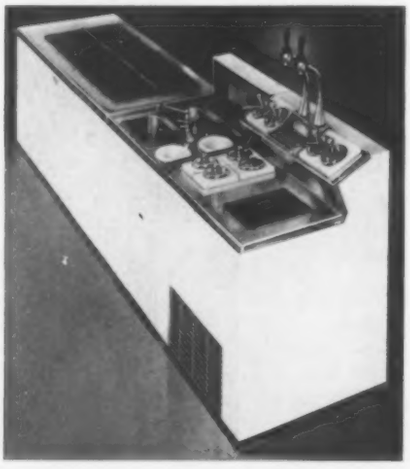
Power failures will happen and they have been known to cause panics when, for example, the lights suddenly go off in a crowded auditorium. The announcement of four new Exide emergency lighting units for school and college auditoriums, therefore, should be of particular interest to school people.

These units are said to be highly flexible and are readily adapted to a wide range of requirements. A typical installation provides emergency lighting for the auditorium, at exits, stairways, fire escapes and other vital points. Each unit is used in connection with an Exide battery of either the chloride or flat plate type. The units have an automatic transfer switch that instantaneously transfers the battery to the emergency lighting circuit upon failure of the normal A.C. supply. When normal service is restored, the emergency lighting circuits are transferred back to the A.C. supply. —Electric Storage Battery Co., 19th St. & Allegheny Ave., Philadelphia, Pa.

• *When inquiring, refer to* **NS425**

Bobtail Soda Fountain

The well-known weakness of school pupils for carbonated drinks makes the new portable bobtail soda fountain unit of Bastian-Blessing Company particularly suitable for school cafeterias. The fountain is said to enable its operator to



dispense carbonated beverages at low cost and when used in combination with an ice cream cabinet gives complete soda fountain service. Small and compact, the unit occupies only 30 by 30½ inches of floor space, including its self-contained compressor. A double sink workboard, finished in baked white enamel to match the fountain, is also available. The equipment is also valuable in the vocational training of both boys and girls, the manufacturer states.—Bastian-Blessing Company, 4203 W. Peterson Ave., Chicago, Ill.

• *When inquiring, refer to* **NS426**

Temperature Controls

How much heat does the building require when the outside temperature is 10°F. above zero? The school engineer can find the answer quickly and easily by means of a "heat requirement calculator" recently issued by Marsh Tritrol Company. By setting the revolving dial of this 5 inch wheel to any outside temperature, the manufacturer states, the regulator indicates the corresponding de-

gree days, the proper time to start heating, the proper proportion of the time that heating is required and the correct time to shut off the heat at night. It also shows the excess capacity of the plant and, therefore, the potential fuel waste at given temperatures.—Marsh Tritrol Company, 600 S. Michigan Ave., Chicago, Ill.

• *When inquiring, refer to* **NS427**

Safety From Shocks

You can't shock a workman who is using an electric extension light if it is protected with the new Ideal Lo-Volt transformer. The unit eliminates injury from shock by reducing line voltage to a harmless 6 volts. It is especially designed for use in damp or otherwise hazardous locations where direct contact with a 110 volt circuit might prove fatal. Dangers from shock caused by bad socket or defective extension cords are also eliminated, it is said. Either two 25 watt, 50 foot extensions or one 50 watt, 25 foot extension can be used with one transformer. The device is compact and easily portable.—Ideal Commutator Dresser Company, Sycamore, Ill.

• *When inquiring, refer to* **NS428**

Assembly Seating

The accent is on toughness in the all-purpose chairs for assembly seating recently announced by Brunswick Seating Corporation. In addition to their ability to take punishment, the three new models feature attractive design, comfort and convenience in handling. The chairs are constructed of Virginia oak, lacquer finished in light or dark oak or "school furniture" brown. Model No. 251 is available in singles or in two, three or four sections. A feature of this chair is that each unit supports its own weight and it is not necessary that the chairs be leaned on a support when they are stored away.—Brunswick Seating Corporation, Lawrenceville, Va.

• *When inquiring, refer to* **NS429**

"Magic Brain" Victrola

A touch of a button provides two full hours of uninterrupted music to classes that are listening to the 1942 RCA phonograph-radio Model V-225. The feat is achieved by means of a "magic brain" with the tandem tone arm, a new type of automatic record changer that plays both sides of phonograph records without turning them over.

The tandem tone arm, which is really two arms and two pickups, swings over and plays the top side of the record which has been dropped to the turntable. After reaching the end of the record, the tone arm swings clear while the direction of the turntable's rotation is reversed. Then it raises far enough to make contact with the under side of the record. When the under side has been played the tone arm swings away and the record is dropped into a compartment.

The "magic brain" mechanism also extends the life of records by using a jewel sapphire point instead of record needles.—RCA Manufacturing Company, Inc., Camden, N. J.

• *When inquiring, refer to* **NS430**

Polaroid Demonstration Kit

The principles of light polarization can be clearly demonstrated to elementary science and physics classes by means of a polaroid optical disk kit recently

announced by the Polaroid Corporation. The kit comprises a metal V-block, with a suitable light shield attached; a polaroid laboratory J-filter and a double-refracting disk that fit into the slots of the V-block; a strip of polaroid J-glass; a strip of black glass, and an especially designed viewing unit. The viewing unit is said to make demonstrations doubly visible by reflecting rays of light against a ground glass screen.—Polaroid Corporation, 730 Main St., Cambridge, Mass.

• *When inquiring, refer to* **NS431**

New Wall Film

What—no soap? No soap—only clear water and a sponge are needed to clean flat painted walls that have been protected with Bergonize, according to the manufacturer. Bergonize is a transparent wall film that is said to place a flat protective coating between the newly decorated wall and dirt, thus preventing dirt from entering the pores of the surface. The material is odorless and easily applied and will dry in twenty minutes, it is stated. It can also be applied to washable wall papers.—Bergonize Company, Merchandise Mart, Chicago, Ill.

• *When inquiring, refer to* **NS432**

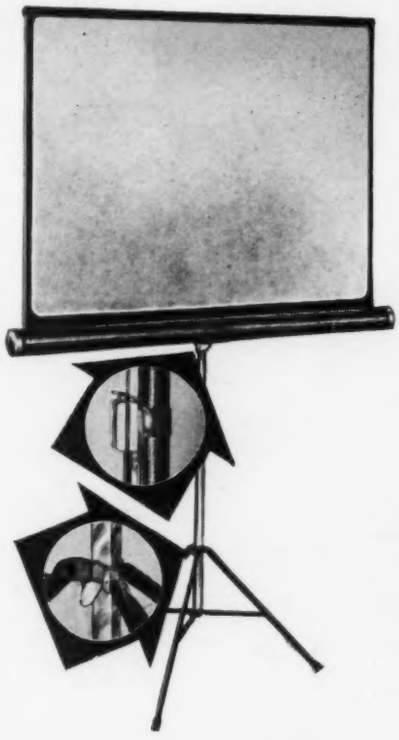
Dishwashing Compound

Six detergents and a water softener combine forces in the new Mathieson Alkali Works dishwashing compound to remove bacteria-laden food residues from dishes, glasses and silverware and to keep the washing water at the proper strength. The constituents of the compound, known as "Super-Mafos," have been subjected to a low temperature fusion process and the resulting mixture is formed into hard briquets.

The briquets are used in an automatic feeding device that it attached to the dishwasher. A stream of water, the rate of which is kept constant, trickles down over the briquets and the solution thus formed meets a stream of clear water in the bottom of the feeder and is carried to the wash water.

The new compound, which works equally well in hard or soft water, is said to be extremely economical.—Mathieson Alkali Works, Inc., 60 E. 42nd St., New York, N. Y.

• *When inquiring, refer to* **NS433**



Radiant Projection Screens

Projection screens to fit the budget are now being offered to schools by Radiant Manufacturing Corporation, which is entering the educational field with a new auditorium screen, a classroom model and a complete line of ceiling and wall screens. Perfect spherical glass beads embedded in a colorless adhesive on a snow-white base fabric ensure the screens' staying white, the manufacturer states. Other characteristics include great light intensity, flexibility and rigid alignment.—Radiant Manufacturing Corp., 1140 W. Superior St., Chicago, Ill.

• *When inquiring, refer to* **NS434**

Duplicator Master Clamp

A quick-change artist that contributes largely to speed and economy in copy-making is the recently developed "Quick-Change Master Clamp" of the Rex-O-Graph Company.

The new device is said to be an extremely quick, simple and efficient method of changing master copies on duplicators of the fluid type. It consists of a V-shaped chromium plated guide and an automatic clamp mechanism that is operated by the crank handle. Reversing the crank opens the clamp to receive the master copy, which is clamped firmly into place when the crank is again started in forward motion ready to run.

When a sufficient number of copies has been run off, the master can be ejected onto the receiving tray with a flick of the handle. The master clamp is built into the new Model MF, which is designed for high production, heavy duty service in systems work.—Rex-O-Graph, Inc., 3719-A N. Palmer St., Milwaukee, Wis.

• *When inquiring, refer to* **NS435**

Jackets for Catalog Cards

Smudged, dog-eared catalog cards and other card records, long regarded as a necessary evil in record keeping, can be eliminated by the use of "Life Extension Cardjackets," according to manufacturer.

The cardjacket is a transparent film that is welded onto the card by means of a miniature, thermostatically controlled flatiron, called a "Kardwelder." The film gives the appearance of a high grade varnish coating and is said to be moistureproof and greaseproof. Temporary checks or notations can be made on the card with colored wax pencils and wiped off cleanly.

Most important of all, it is said, is the fact that the reading matter that is covered by the cardjacket actually becomes more legible than it was before the card was covered. The cost of applying the film is said to be less than one cent per card.—Seal, Incorporated, Shelton, Conn.

• *When inquiring, refer to* **NS436**

NEW LITERATURE

New Type of Coal Heater

Especially adaptable to use in the small school is the "Warm Morning" coal heater. The unit is described and illustrated in a brochure recently published by the LOCKE STOVE COMPANY, KANSAS CITY, MO. Several models and sizes are illustrated and instructions for the proper installation of the equipment are included.

• *When inquiring, refer to* **NS437**

Manual of Electric Cookery

Information on the development and use of electric cookery is contained in the 16 page "Manual of Electric Cookery" published by the National Electrical Manufacturers Association. The first section of the booklet deals with the construction of the electric range and the second section is devoted to a discussion of electric cookery as a scientific art. Information on how to obtain copies may be obtained from the ELECTRIC RANGE SECTION, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION, 155 E. 44TH ST., NEW YORK, N. Y.

• *When inquiring, refer to* **NS438**

Machine Tool Catalog

Fifty-six illustrated pages of information on machine tools are contained in the revised catalog of WALKER-TURNER CO., INC., SOUTH AVE., PLAINFIELD, N. J. The standard line of metal and woodworking machine tools manufactured by this company is explained in detail. In addition, a number of entirely new machine tools that have been developed primarily for the defense industries are shown.

• *When inquiring, refer to* **NS439**

Physical Training

Practical instructions for the physical education instructor are set forth in this manual prepared by Charles E. Miller, gymnastic coach at the University of Nebraska, and published by FRED MEDART COMPANY, ST. LOUIS, MO. Exercises are presented by means of drawings, with explanatory text, for beginning, intermediate and advanced work on horizontal bars, parallel bars, stall bars, flying rings and side horses. Three chapters are devoted to tumbling exercises.

• *When inquiring, refer to* **NS440**

"Romance of Rubber"

The story of rubber, its history, manufacture and application to modern living, is contained in the 46 page booklet that the UNITED STATES RUBBER COMPANY, ROCKEFELLER CENTER, NEW YORK, N. Y., is offering to schools for classrooms. Part of the book deals with the process of obtaining rubber, tire making and industrial and household applications. Other chapter headings include "Chem-

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ADVERTISERS

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NOTE:

To get further information conveniently, refer to products by key numbers. Each product or new literature item in the What's New section has a key number. For key of products described in advertisements use key numbers assigned to advertisers as listed in the adjacent advertisers' index. These key numbers should be used when writing manufacturers direct or when using this self addressed mailer which requires no postage.

FOLD DOWN ON THIS LINE

TEAR OFF ALONG PERFORATION

The NATION'S SCHOOLS, November 1941

I WANT

information from the manufacturers of the products designated by the following key numbers:

Nos. ....

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The Nation's Schools Publishing Co., Inc.

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CHICAGO, ILL.

NEW LITERATURE (Continued)

(*Continued from page* 98)

istry Makes Rubber Serve Us," "Preparing Dry and Liquid Rubber" and "Rubber Serves Us."

• *When inquiring, refer to* **NS441**

"Guide to Better Cooking"

The preparation of food in Revere copper-clad stainless steel ware is the theme of this brochure published by Revere Copper and Brass, Inc., Rome Manufacturing Division, Rome, N. Y. The best methods of cooking meats, fish, fruits and vegetables are described and the care of the utensils to lengthen their lives and to obtain the best cooking results is explained and illustrated.

• *When inquiring, refer to* **NS442**

Fluorescent Illumination

Hygrade Sylvania Corporation, Ipswich, Mass., has recently compiled a catalog of information on "Miralume" fluorescent lighting. In addition to illustrations and descriptive material on various types of fluorescent installations, the booklet contains a table of recommended minimum standards of illumination.

• *When inquiring, refer to* **NS443**

Steel Shop Equipment

Work benches, stools, stock and tool carts, tool cribs, cabinets and numerous special purpose products are described and illustrated in the 40 page catalog of steel shop equipment recently issued by Lyon Metal Products, Inc., 3148 Clark St., Aurora, Ill. A number of new items in this company's line include arc and gas welding benches, a sheet metal worker's bench and two and three shift drawer inserts.

• *When inquiring, refer to* **NS444**

Gas Heated Food Warmer

"Thurmaduke," latest product of the Duke Manufacturing Co., St. Louis, Mo., is introduced to the school field in an eight page brochure. The unit, which comprises several sections, is designed to keep various foods at the temperatures that are best for them. Each section can be operated separately and turned to the desired heat. Food is heated by direct radiation, the manufacturer states, and high efficiency insulation holds the heat.

• *When inquiring, refer to* **NS445**

Album of Lyric Verse

A new "Anthology of English Lyric Verse," recorded by Cornelia Otis Skinner, has been added to the Victor masterpiece series of RCA Manufacturing Company, Camden, N. J. The album contains works of poets from the Elizabethan age to the present day.

• *When inquiring, refer to* **NS446**

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Side Glances—

WOULD you like to tell us what 1942 is to bring to readers of The NATION'S SCHOOLS?

You would be rated poor in perception if you did not anticipate considerable emphasis on national defense. You would guess, too, that there would be follow-up articles on each of the 36 special topics covered by portfolios in the last three years.

You would hit it right if you decided that the big January portfolio would deal with secondary schools, inasmuch as last January's special section covered elementary school construction. You would guess, too, that the secondary schools illustrated and described would be hand-picked by regional school building authorities from the 11 geographical areas.

You would be reasonably sure that each issue in 1942 would carry Big Name or Future Big Name articles on small and large school administration, instruction, personnel, guidance, philosophy, community relations, child accounting, law, the cafeteria and audio-visual aids with the free space assigned to other subjects and news. You would be fairly certain that each month would bring another special portfolio.

You would be willing to put your pay check on the fact that Editor Moehlman would not suddenly decide to pussyfoot on current issues and dexterously avoid all references to topics controversial.

You see, you have told us in advance pretty much what you are going to get in 1942—through your steadily growing support and through your pointed correspondence. Your surmises are correct but there will be some surprises, too.

Published monthly by The Nation's Schools Publishing Co., Inc., 919 North Michigan, Chicago, and 101 Park Avenue, New York. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, United States and Canada, $2; foreign, $3. Current copies, 25c each. Member Audit Bureau of Circulations.

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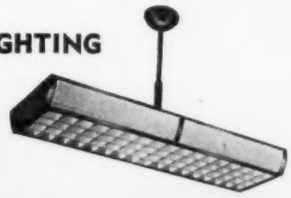

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BETTER PLANT PRACTICES

Those Small Claims

The problem of the payment of small claims, that is, claims of $2 or less, is met in most school systems by a revolving or petty cash fund of between $50 and $100. Receipts are taken in duplicate for expenditures against the account, and little difficulty is experienced by school officials in getting the bills for these small item payments approved. Occasionally, when purchases are made from department stores and the charge slip is pasted on the package, the slip may be thrown away with the wrappings. Then, duplicate charge slips must be obtained from the stores. The usual run of supplies is purchased, of course, by regular purchase order.

Run Monthly Accounts

In Columbus, Ohio, emergency and perishable supplies in small amounts, which are usually home economics items, are purchased by teachers at neighborhood stores on monthly charge accounts, according to W. V. Drake, clerk-treasurer of the board of education. "At the close of each month," he states, "the bills, properly certified by the teachers, are turned in to the clerk-treasurer's office and he remits direct to the vendors.

"In general," Mr. Drake continues, "we do not have any difficulty in getting bills approved for payment. Invoices are rendered in duplicate and one copy is sent to the principal or teacher who ordered the goods for approval. When the bill is returned, payment is made immediately if cash discount is offered. If there is no cash discount, the bills are held over and submitted to the board once a month for approval in the form of a condensed statement showing the name of the vendor, a brief description of the purchases and the total amount due each vendor."

In Columbus the clerk-treasurer of the board of education is given the authority to pay all discount bills for which properly approved purchase orders have previously been issued; he may also pay bills for utilities, such as electricity, gas and water. All other bills are submitted to the board for approval at the first meeting in each month.

Draws From Petty Cash

In Little Rock, Ark., supplies that cost $2 and less are paid by check issued from a petty cash account. This is separate from all other accounts, which are issued and signed by the clerk in the superintendent's office. This account is reimbursed at the end of the month.

"All monthly bills," Supt. R. T. Schobee tells us, "are vouchered at the end of the month and presented to the board in list form for approval." He has encountered no difficulty in getting bills approved for payment for, as he says, "any large amounts expended have already been incorporated in the annual budget or made a special item that is

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SAVE YOUR FLOORS
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Since his recommendations place you under no obligation whatever, why not ask him to call? Write today!

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INDUSTRIAL DEPT., JERSEY CITY, N. J.

approved by the board before any action is taken."

No Trouble With Approval

E. L. Marvin, clerk and business manager of the public schools of Billings, Mont., is another school official who never has had any difficulty in getting approval of bills for small item payments.

"We pay practically all claims for items under $2 by cash from a revolving fund known as 'petty cash fund,'" Mr. Marvin states. "We carry this fund as one of our assets on the general ledger. We take receipts in duplicate for expenditures from this fund, using a petty cash ledger, and we balance from that. Periodically, we attach the original receipts to a claim, the payment of which brings the fund back to its original state. In our case this is $50. We run the claim in with other regular claims on the first of each month and it is approved by the finance committee after thorough checking by our accounting department and approval by the business manager."

All Items the Same

Vouchers are issued for the payment of all invoices, no matter what the amount, after the bill has been checked in the office of the assistant superintendent of schools in Quincy, Ill., and approved by the auditing and supplies committee of the board.

C. E. Lane, assistant superintendent, describes the procedure as follows: "For each purchase made a triplicate order is issued; one copy goes to the merchant, one, to the person requesting the article and the third is retained for our files. In this way the difficulty of approving the bills is simplified and all bills are paid regularly at a regular meeting of the board of education."

For Articles Under $1

A revolving cash account is set up to take care of small items costing less than $1 in the Independent District of Yankton, S. D. Israel Daniels, clerk, explains that all invoices are approved in advance of the regular meeting of the board by the chairman of the committee, authorized to approve purchases and by the chairman of the finance committee. These two members of the board, with the okay of the business manager, guarantee approval for payment.

Sweeping Clean

There should be a definite sweeping schedule if the building is to be maintained properly. In a bulletin issued by the Department of Public Instruction, Des Moines, Iowa, the procedure outlined is to sweep all halls and entrances after school is called at 9 o'clock. Again, after recess period, the halls are swept; at least, those that were used during that period. This is repeated in the afternoon.

A dust mop on which a light coating of cleaning oil has been added is best for all types of finished floors. If the floor is excessively dusty, it may be necessary to use a compound in sweeping. During bad weather, mud and sand may be carried into the building; in this case the room should be swept first with a broom and then with a dust mop.

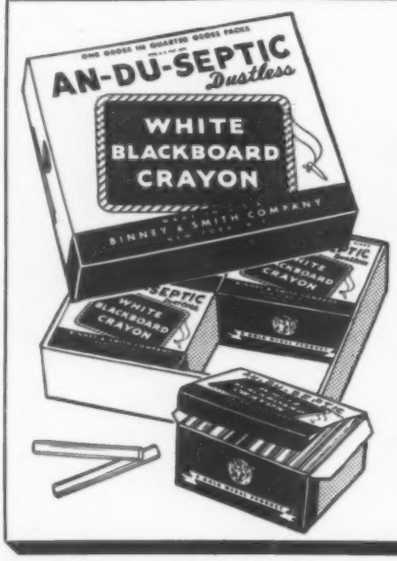
The life of a dust mop depends upon the care that it receives. Mops should be washed and dried regularly to keep them in good shape for use.

In this connection it has been discovered by Ruel E. Daniels, district clerk and business manager, Belleville, N. J., that the tying of the ends of any mop increases its life about 300 per cent. This procedure also lessens the labor cost because of the fact that tied mops will not leave lint on the floor.

Timely Hint

The inside of a fresh loaf of bread will remove wax crayon marks from limestone when muriatic acid fails. This information may help during the football season, according to Mr. Daniels, business manager at Belleville.

MODERN SCHOOL ESSENTIALS FOR DOUBLE PROTECTION OF BOTH PERSONNEL AND BLACKBOARD EQUIPMENT



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DUSTLESS
WHITE CRAYON

These finest quality Gold Medal White Blackboard Crayons are entirely free from irritating dust and other gritty particles. Now available by the gross in quarter-gross packs as shown.

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NON-POISONOUS
COLORED CRAYON

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— *at your finger tips*

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You can be sure that any floor finished with LIGNOPHOL will stand up to hard usage—will last longer—will look more attractive.

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See reproduction of various woods in natural colors in Sweet's Catalog, page 17/40.

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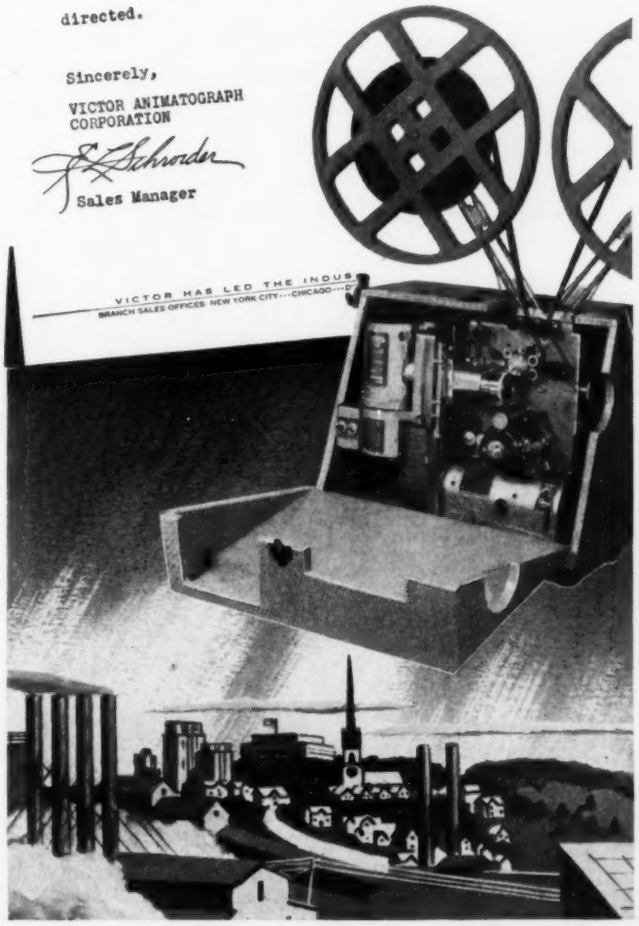

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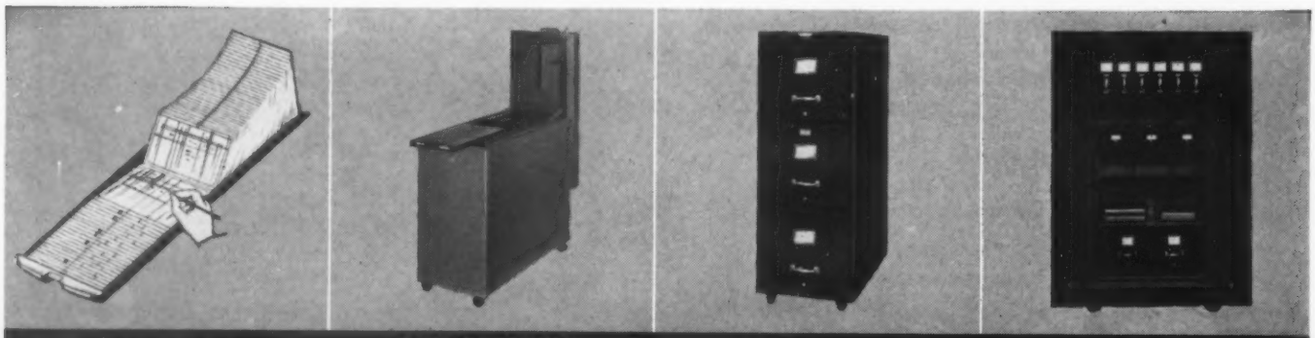

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LOOKING FORWARD

Schools and National Defense

PUBLIC education is the first line of internal defense in the struggle for the maintenance and improvement of the democratic way of life on this continent. Invincible air armadas, a superior two-ocean navy, a huge mechanized land army and the battles they will win are going to be of little avail if the chief agency for producing individual democratic competence —the public schools—is shortsightedly neglected. President Roosevelt realized the school's vital importance when he recently declared: "We must, therefore, redouble our efforts during these critical times to make our schools and colleges render ever more efficient service in support of our cherished democratic institutions."

Current educational budgets are too small. Increasingly large sums must be spent upon the public schools to promote their effectiveness and to extend their services. The operation of the schools is a complicated activity. It is not alone necessary to provide well-trained and competent teachers. The teaching process also requires a safe and efficient physical environment in the form of physical plant. This plant demands constant attention to structure and to equipment if its efficiency is to be maintained. Teaching requires equipment adapted to modern instructional needs, visual materials, textbooks, library and reference books, supplies and other materials of instruction.

Under the current practice of priorities or allocations practiced by the defense procurement agencies, school equipment and supply manufacturers have already been seriously handicapped in their efforts to serve the schools. Steel for desks and tables, special metals and materials for laboratory equipment must be available if the manufacturers are to continue to meet the needs of the schools successfully. Steel for school equipment should certainly rate as high as steel for pleasure automobiles.

It is sincerely hoped that the federal defense procurement agencies will pay heed to the significant resolution adopted by the National Association of Public School Business Officials at its Atlantic City meeting in which the attention of the government was called to the seriously handicapping conditions that are growing out of priorities promulgated on a too narrow base in terms of total social need.

Minnesota Politics

IN THE September issue under the caption, "Politics and Education," we commented on Governor Harold Stassen's share in the dismissal of Commissioner Rockwell as an example of undesirable political interference with public education. On September 24 Dr. Julius Boraas, president of the state board of education in Minnesota, a member from 1919 to 1937 and reappointed by Governor Stassen in 1939, wrote us that "some statements in the editorial appear to be misleading or contrary to facts." Since our careful original investigation of this problem indicated that the governor was directly involved in the Rockwell case and that, under the surface, it was really a Republican-Farmer-Labor political struggle, we wrote Doctor Boraas for further facts and also continued our own investigation among educators and informed laymen.

The point emphasized editorially was that the governor had interfered on political grounds. The issue of Doctor Rockwell's efficiency as an administrator was not considered. The former incumbent is acknowledged as a brilliant scholar but there are wide differences of opinion among both his friends and opponents concerning his administrative ability.

Our continuing investigation indicated clearly that Governor Stassen had interfered politically with the state department of public instruction in the dismissal of Doctor Rockwell from office. This conviction is further upheld by the official statement of Mrs. Sarah T. Colvin, sole minority member of the board, who resigned on October 22 after charging Governor Stassen with "political interference in the activities of the education department." Her letter of resignation to the governor stated in part:

"The board has by various means since August 1940 succeeded in removing from their positions 11 em-

ployes in the department, most of whom believed they had rights under the civil service law. . . . The board acted as prosecutor and jury in the dismissal of both Dr. John G. Rockwell as education commissioner and Eugene D. Carstater as director of vocational education. . . . I can no longer continue as a member of a board, which in little more than a year, has transformed a vital, dynamic department of education into a timid group of employes. . . . During the first year and a half of your administration, the board was able to carry out its work free from political interference. Since July 1940 the picture has abruptly and completely changed. And ever since that time events have convinced me that you have taken a more direct interest in the activities of the board."

We believe that the opinions of prominent schoolmen and laymen, together with the resignation of Mrs. Colvin, completely substantiate our September opinion. Regardless of how Minnesota schoolmen feel personally toward Doctor Rockwell, practically all of them agree that Governor Stassen did interfere politically with public education. In our opinion, the governor's action was extremely unfortunate.

San Francisco

ADVANCE registration for the February meeting of the American Association of School Administrators at San Francisco is fully up to the 1940 total at a similar date. There is every indication that this West Coast meeting will be well attended. Analysis of registration shows that the proportion of registrations from west of the Mississippi is much greater than that from east of the big river. There is an unusual lag in reservations from the Atlantic seaboard, from Maine south to Florida. There is also a significant decline in the registration of administrators from New York, Pennsylvania, Ohio, Michigan, Indiana, Illinois and Wisconsin.

The 1942 convention marks the end of the first year of American war effort and should be extremely significant from the standpoint of total defense. The current tendency of the federal administration to give lip service to the importance of the public school in national defense without implementing that program in practice is something that a united and thoroughly representative teaching profession needs to consider. Eastern, midwestern and southern educators cannot afford to miss the West Coast meeting.

Classless Schools

ONE of the fundamental requirements of a democratic social order is the need for creating such equality of individual opportunity that "all artificial barriers to the choice of an occupation" are removed by organized society. The great American dream of "equality of opportunity" is more than a will-o'-the-wisp. Its acceptance and progressive implementation are absolutely essential to the continuation and improvement of our American way of life. The public schools, conceptually an impartial, nonpartisan, nonsectarian, classless agency, through which all children may receive their educational birthright, are of extreme importance in providing and maintaining the concept of equal opportunity.

While true equality of opportunity has been retarded because of obsolete structural organization, inadequate finance, poorly trained teachers and lack of individual means to accept educational opportunities offered, the public school system in the United States is essentially a one-way plan, free and open to all. A gradually growing public opinion is making great strides in eliminating existing inequalities.

The rate at which improvement takes place will be conditioned to a large extent by the vision and leadership displayed by the teaching profession. The continuation of democracy will depend upon the extent that opportunity is kept completely open to ability in this country both in the schools and in adult life. Any economic or educational practice that is prejudicial to race, color or creed is too dangerous to be tolerated.

One of the great dangers to the classlessness of the public schools comes from within the teaching profession. The growth in teaching specialization has produced a crop of teachers who are deficient in general education and in an understanding of the total culture of which they are a part. Their mechanistic training has given them little understanding of some of the fundamental problems facing democracy. Their philosophy is that of shortsighted expediency, a natural development of a much too narrow education. Their attitudes toward the great problems of education are colored by their own specialization and personal ambitions.

The teaching group that is most dangerous to the unity of American education is that of the vocationalists. The rank and file of these specialists are well-meaning but narrow-visioned individuals. They represent specialization carried to the extreme of being willing to sacrifice general social values for the advancement of the single curricular activity of vocational education.

Under the professional influence of other members of the teaching profession, the vocationalists might gradually absorb some of the deeper meanings and values of education but they are almost forcibly herded into a special interest organization by an even narrower and more selfish group of leaders that has its apex in the U. S. Office of Education in the administration of the Smith-Hughes and George Deen acts. They operate through one of the most selfish of interest groups, the American Vocational Association. Their shortsighted attempt to dominate public secondary education, even to the extent of advocating a dual system of public education, is one of the real dangers

to a classless system of democratic education. The claims, the propaganda, the programs and the pressures of the vocationalists deserve the most searching criticism and they need to be tested in each case in terms of our fundamental educational purposes by the people within the community and state.

The Board of Education

THE board of education is the community education authority, deriving its power from statutory enactment by the state legislature. It is legally responsible for the planning, executing and appraising of the local school program. The growth of the schools in size and complexity and in the technical development of teaching has made it desirable from a functional standpoint to have the school board delegate completely its executive authority and act for the people only as the lay planning, appraising and interpretive body.

There are 126,849 boards of education with a total of 424,000 members. These range from the typical three-member rural to the typical seven-member urban board. There are at least 100,000 too many school boards just as there are that number of undesirable marginal and submarginal school districts. In general, the quality of the board of education varies with the adequacy of the district but there are sufficient exceptions to indicate that the quality of the board is conditioned by the opinion of the community toward education and by the type of professional and lay leadership.

Boards of education include men and women past middle age who have been successful by community standards. Parents tend toward conservatism in the education of their children and, undoubtedly, express this attitude in their selection of school board members.

The board of education has a definite responsibility to act as an equalizer and harmonizer of the community and professional points of view. Under normal conditions school board policy will always tend to be somewhat behind professional thought and practice. This condition represents the almost inevitable lag between the layman and the professional specialist and is by no means confined to public education. There will always be a gap between professional thinking and immediate community practice.

Despite professional criticism of boards of education, this American practice is a sound democratic device that is definitely capable of improvement. The responsibility for such improvement rests with the teaching profession and the community and its expression is through the normal processes of informal and formal adult education.

The process of improvement consists in creating better understanding of the nature and needs of education and of the actual practice of the partnership principle. A more complete and continuous involvement of the community in the support and development of the educational program will result in the more consistent focusing of attention upon the quality of community educational representatives. Improvements that are already quite noticeable in their effect are the growing importance of women as board members and the election of nonpartisan boards with fewer numbers and longer terms of office, which make possible greater stability in educational policy. The process of democratic change is slow and the great improvement in school board organization is dependent to a large extent upon the rate of improvement in structural organization.

Speaking of Ethics

NUMEROUS complaints have been received since August concerning unethical practices on the part of school administrators in those sections of the country affected directly by the extension of vocational education activities resulting from the national defense program. If the stories of administrators in adjacent and even far outlying districts are to be credited, the first group of superintendents has been conducting a campaign for specialized personnel that combines certain aspects of kidnapping, hi-jacking and shanghaiing.

The composite story runs like this: Beginning in early August, educational defense centers began to raid outlying districts for vocational and science teachers by offering them tempting increases in salary. They advised these teachers to break their existing contracts without justification. They engaged in completely unethical pressure campaigns among teachers in other districts to leave their jobs for these new and possibly temporary fields.

The picture is not a pleasant one. It bears out the contentions of the teaching body that there are actually in operation two sets of professional ethics, one for teachers and one for administrators. Public education apparently needs a greater administrative sensitivity to fair play.

A Teacher Speaks

AMONG some letters recently received, one deserves restatement in part because of its brightly burning flame of teaching enthusiasm and optimism. We don't believe the dear lady would like to have us mention either her name or her age but she says: "I am starting my fifty-second year of teaching and I have even more enthusiasm than ever before. We teachers have a wonderful chance to help young people in their struggle to interpret life and to introduce them to the wonders of living."

The Editor

Developing Citizenship,

PROBABLY the most significant and truly American experience that boys and girls of today can be given is that of living in a genuine school democracy, a democratic community that is part of the larger democracy to which they owe allegiance. The creation of such a community has for a number of years been the objective of pupils and faculty of Edgewood School in Jefferson County, Alabama, which is situated in one of the Birmingham suburbs. Nine or ten years ago the student body through its student council adopted the "Code of the Good American" suggested by William J. Hutchins. This code to which all Edgewood School citizens subscribe before they are permitted to become qualified voters in school elections is as follows:

"The good American tries to gain and keep perfect health. The good American controls himself; is self-reliant; plays fair; does his duty; works in friendly cooperation with his fellow workers; is kind; is loyal."

Above: The health club drinking the mid-morning milk. Left: The primary department at lunch. Below: The third grade class says grace at the annual Thanksgiving luncheon.

In classrooms, library, shops and on the playground there has been constant evidence of growth in these ideals. Only recently, however, have we come to realize that our school cafeteria has had an outstanding part in this development. With the realization that the lunchroom provides a free and natural setting for development in human relationships has come a tendency to utilize even more

Cafeteria Style

SUE B. CARLISLE
Principal, Edgewood School, Homewood, Ala.

fully the opportunities it provides for pupil development.

From the standpoints of organization, administration and service rendered, the lunchroom is truly democratic. It is an attractive and friendly place under the guidance of a genial and capable manager. With the help of the P.-T.A. lunchroom chairman and the county lunchroom supervisor, she works in a true spirit of cooperation for the good of all. Although a majority of the 500 pupils live within a few blocks of the school, no one goes home to lunch and the lunch period becomes part of a unified school day.

The lunchroom has been highly successful in teaching lessons of cooperation; the pupils work willingly to keep it orderly and inviting. Some of the most satisfactory work in the art classes has been group projects in the form of murals and health posters for the lunchroom walls. The student council often makes suggestions as to the most efficient way of handling the cafeteria lines and the placing of food. It assumes responsibility for maintaining a standard of deportment similar to that found in the best commercial cafeterias.

The pupils realize, also, in a general way, without knowing specifically who is being helped, that the small percentage of pupils who are unable to buy lunches are cared for out of the surplus income from the general patronage.

Self-reliance, especially in the case of beginners, is developed nowhere as rapidly as in the lunchroom. Youngsters who only recently were entirely dependent on mother and nurse, carry their own trays, select a grade "A" lunch on their own initiative and pay for their lunches in happy self-confidence.

The ideal that is nearest to the hearts of the Edgewood pupil body is probably that of good sportsmanship. Fair play is shown by the honesty with which the pupil handles food and money, turns in mislaid change and property and shows his dependability by assuming the responsibility for his own conduct so that the teacher may have a period of comparative relaxation. Thus, good sportmanship appears not only on the playground but in the lunchroom as well, where one of the unwritten laws is to take one's place in line without attempting to get ahead of someone else by pushing or taking any other unfair advantage. A good citizen in the Edgewood

Class officers of the eighth grade graduation class seated at the head table at the banquet given by the lunchroom manager and the P.-T.A. lunchroom committee.

School democracy is kind. The lunchroom affords excellent opportunities to help those who are temporarily or permanently disabled by accident or illness. Consideration for the colored helpers is constantly encouraged while pupils are being served and as they return trays to the service window. Courtesy demands that tables be left in an or-

Sixth grade pupils put the finishing touches on the mural in the cafeteria. Art classes also make posters on various health subjects to decorate the walls.

Even the helpers enjoy the picnic which is given each year on May Day.

derly, attractive condition for those who must follow.

Courtesy and self-control are important features of the social training that the lunchroom experience offers. It is of vital importance that all human beings learn to live and work together harmoniously. The large groups and the freedom of the lunch period afford excellent opportunities for practice in the control of voice and actions in a routine everyday situation.

Frequently, however, when more than routine conditions are desired, the lunch period may be used for special training in good manners. For example, in junior high school classes in which personality development is being stressed, the class may be divided into small groups, each table having a host or hostess who seats his classmates and directs conversation along interesting lines. Such occasions offer opportunity for the pupils to obtain valuable practice in some of the simpler aspects of table etiquette.

From a social standpoint, too, the lunchroom has been invaluable in creating a gracious background for the many delightful occasions that have become traditional in the life of the school and community. At the Thanksgiving luncheon each class is seated at its own long table and, before the food is served, offers some appropriate expression of gratitude. During the Christmas tea, the glee club appears at the pine-decked windows in early English costume and sings many of the well-loved carols. As a climax to the social training that the school and lunchroom have considered so important, the eighth grade graduation class is entertained at a delightful banquet, a generous and gracious courtesy from the P.-T.A. lunchroom committee and the cafeteria manager.

From the broader standpoint of training in citizenship, the matter of health guidance, of course, will always take first place in the work of the lunchroom. Just so, the first law in the code of the good American says, "The good American tries to gain and keep perfect health." Good health is recognized as a prerequisite for all sound pupil growth.

Surely, the lunch period in any school affords an ideal opportunity to practice what has been developed in other areas of school work. Rest before and after eating becomes a habit in the quiet period before lunch and the rest period following when the smaller children are induced, if possible, to take a real nap and the older boys and girls indulge in some quiet form of relaxation.

The fundamental rules of cleanliness and sanitation are emphasized in the care with which food is wrapped and handled. Good habits are formed by the invariable procedure of thorough handwashing before entering the lunchroom.

The selection of food in the most healthful combinations is discussed in the classrooms after pupils have studied the daily menu on hall bulletin boards during the morning free period. It becomes a matter of self-respect for all pupils, even those who have been real problems during mealtime at home, to choose and dispose of a well-balanced meal every day.

Health clubs, composed of boys and girls who are trying to gain weight, meet in the lunchroom and drink their half pints of milk during the mid-morning relaxation period, often called "the fruit period," because of the abundance of fresh fruit that is available at this time in the lunchroom. Frequent weighing and measuring of pupils are routine. Patrons whose youngsters have gained weight rapidly and have developed good habits of eating are loud in their praise of the improvement that the lunchroom is accomplishing.

On May Day, observed at Edgewood as Child Health and Play Day, pupils who have made the greatest gains in weight during the school year are especially honored. The lunchroom, as always, adapts itself to the occasion by serving a sumptuous picnic lunch in a lovely shady grove on the school grounds, a gala occasion for pupils and patrons alike where the quality of loyalty in the form of school spirit is much in evidence.

Thus, our school cafeteria has played its part in the building of our small democracy and will long be remembered, we believe, when our boys and girls take their places in the larger democracy beyond.

Pointers on Public Relations

O. F. PETERSON
Superintendent of Schools, Motley, Minn.

THE need for a public relations program for schools is based on a democratic principle. The schools have been established by the people, are supported by the people and belong to the people. The welfare and progress of the school are dependent upon the efficiency with which it serves the social need and also upon how well the people understand and how highly they approve its work. Without community confidence, no democratic school can long succeed. This situation places upon school officials an obligation to provide information that the people desire and to which they are entitled. In other words, democracy obligates school people to provide a public relations program.

Moehlman defines public relations as that activity whereby the institution is made aware of community conditions and needs and the factual informational service whereby the people are kept continuously informed of the purpose, value, conditions and needs of their educational program. This definition reveals two major aspects of activity. The first aspect involves such activities as are necessary to develop an understanding of the needs and conditions of the community. The second relates to those activities by which the people are made aware of the institutional conditions and needs. While these two aspects are complementary and integrative in nature, the first is the foundation upon which the success of the second must rest.

Defining Educational Objectives

It seems basic to any good public school relations program that there must be a definite formulation and a clear understanding of the objectives of education on the part of all teachers and administrators. Although this is, perhaps, a large order to face in view of the present economic confusion, there are certain fundamental objectives that we can definitely formulate and on which we can substantially agree. Every teacher needs to have these objectives clearly in mind and to study them carefully so as to understand their full meaning.

There must also be unmistakable and effective achievement of those objectives by schools. Good public relations must be the reflection of a good school. It cannot be based upon a poor school, for the school, after all, is the best agent of public relations. This principle calls not only for the formulation and understanding of objectives but for skill in organization and administration that will put the objectives into practice.

The public must also be acquainted with the educational objectives, as well as with what the school is actually doing to realize these objectives. Some writers believe that the general public or its citizen leaders should share in the formulation of these objectives and in the working out of plans for achieving them. Perhaps citizen cooperation would be more real and vigorous if it began with the formulation of objectives, plans and policies rather than with requested acceptance of the finished product of the school.

If these basic elements are to be developed in a public relations program for schools, the procedures to be used in carrying out the program should possess several well-defined characteristics. Grinnell and Reeder list seven that are well adapted to our purpose.

The program of public school relations should be *continuous*. The history of social change presents ample evidence of the fact that public opinion is slow to develop. For example, the continuing contract for teachers is said to have been advocated for thirty-five years before it was finally passed by our legislature. Similarly, prohibition and women's suffrage were urged upon the public for generations before they could be incorporated in the constitution. Publicity spread over a long period of time is bound to be sounder and more honest because the people have plenty of time to test its reasons and contentions. Such testing will inevitably result in greater confidence because there will be no suspicion that the schools are trying to "put something over" on the public.

Progress in any real sense, therefore, usually comes as a result of a patient process of interpretation, one that is steady, reasonable and consistent. To carry on such a program requires both strength of character and professional devotion.

The sound public relations program is also *honest*. An honest, frank and clear presentation of the facts will generally gain support. School administrators who have subscribed to a doctrine of thoroughly honest representation of the schools have reported heightened morale in the community. While it might seem from a superficial examination of the issue that to play up the strong points and to cover up the weaknesses is more desirable, the public relations program that conscientiously attempts to paint a true picture of the schools is more likely to gain popular support than one that aims to whitewash their weaknesses.

"Balanced Diet" Necessary

The program must be *inclusive*. The primary interest of both parents and the public-spirited taxpayer is in the progress of the child. Inclusiveness implies a properly balanced diet of school information for the public. The educational worker cannot expect the community to be permanently interested or sympathetic until all the important facts relative to the progress of the child are revealed. Farley found that facts that interest the layman most, such as information about classroom procedures and results of teaching, are rarely revealed adequately.

An inclusive public relations program must deal with the larger aspects of education. What are the dividends on investment in education? What are the costs on the basis of the services rendered? How has the purchasing power of the dollar been affected? What effect on costs has the increase in high school enroll-

ment had? All major activities and interests of the schools should be kept before the people all the time. An inclusive program, however, does not imply revealing confidential information about pupil personnel. Such a policy would be short-sighted and contrary to the best interests of the child. It does mean that an inclusive program places its major emphasis on those school activities that are of major importance.

The public relations program must be *understandable*. Clear, forceful writing is what the public demands. It should be humanized by vivid illustrations, concrete nouns, live verbs and a few adjectives. It should be remembered by all writers that education has a language peculiar to the profession and that to write effectively for the public requires the style of a good journalist rather than that of the author of a professional book on education. Various authorities have advocated a style of writing suited to the average seventh grade pupil or one that can be understood by those who rank among the lower 10 per cent in intelligence. The use of charts, graphs and illustrations is valuable in any type of public relations materials.

Public relations must be *dignified* but *aggressive*. These characteristics imply that school officials must recognize that it is their first duty to run the best school possible and that to provide information about the school is of secondary importance. Teachers and administrators must devote their chief efforts to "doing their work" and should avoid overemphasis on public relations. On the other hand, good will must be developed on the part of those who are in a position to influence the institution. This does not imply pulling the wool over people's eyes or putting into effect some of the popular conceptions of how to win friends and influence people.

Fundamentally, this concept involves four elements: first, treating all patrons and pupils of the schools with the consideration they deserve; second, making the public acquainted with the facts of the schools as a whole; third, a devotion on the part of all teachers to the welfare of the pupils and the general development of the community, and, finally, a realization on the part of all members of the staff that education is judged partially in terms of the impression they make on the general public.

When proper dignity and aggressiveness characterize the public relations program the public will realize that it is investing in its own future. Schoolmen, too, will realize that they are not beggars for a small local charity but that they are entrusted with civilization's most important enterprise and that, as trustees, they must give a continuous and dignified account of its values, aims, progress and needs.

The school public relations program, to be successful, should also *reach everyone* in the community. The successful program must reach laboring men who are too young to have families, retired farmers, merchants and professional men whose children are no longer in school, as well as parents of school and preschool children. Much opposition to the schools comes from groups that have not been made to feel that they are a part of the school community and that they, too, are friends of the schools.

The public relations program should use every possible facility at hand. This may necessitate a survey of the schools and community for means of telling the public about the schools. The successful program must use every agency if it is to reach continuously every corner of the community. Every agency should be explored for its strength and weakness. Schoolmen who start building a public relations program with the conviction that they are not using all possible facilities will soon develop a many-sided communion with the public.

Largest Rural School in Kansas

The indirect lighting system is controlled by a photo-electric cell which automatically switches on the lights when the natural daylight ceases to give sufficient illumination and then turns them off when they are no longer needed.

Eureka Elementary School, Sedgwick County, Kansas, was designed by the late Glenn A. Schafer, architect, Wichita, Kan. Built of concrete in two units set at right angles to each other, it is fireproof throughout. Wall colors were chosen for their light reflecting values.

Superintendent as Supervisor

ROALD F. CAMPBELL
Superintendent of Schools, Preston, Ida.

THE superintendent of schools, at least in name, is the chief supervisory officer of any school system. In large cities this function is often delegated to an assistant superintendent, a curriculum director or a director of instruction. Since most school systems are small, the superintendent must be the chief supervisory officer in fact, as well as in name. In this paper some examination will be made of the job of the superintendent as a supervisor in smaller schools.

First, what is the purpose of supervision? Most students of the problem agree that it can have but one purpose, namely, the improvement of instruction. Barr, Burton and Brueckner contend that supervision should be directed toward the total teaching-learning situation rather than toward improving teachers in service. In other words, it directs attention to what is happening to children.

Goals of Administrator

Benjamin puts the matter well when he says: "The educational administrator organizes a group for learning, the most truly human of all activities, toward the goal of a better life for all members of the group, the most humane of all objectives." Some of the ways in which a superintendent can help will be analyzed with this purpose in mind.

In this appraisal certain principles will be stated with the thought in mind that specific technics are to be employed only as they contribute to the purpose at hand. No prescription can be given for hours to be spent in class visitation, conferences to be held, bulletins to be written, meetings to be scheduled and the many other technics that are commonly thought of as supervision. Visits and conferences, for example, should be employed when they will improve the teaching-learning situation. Some of the principles that might be related to such improvement are here treated briefly.

1. The superintendent should be interested in the instructional program. He ought to see that business management, public relations and personnel administration have only one reason for being and that is for the better instruction of children. It requires more than intellectual assent to achieve this result. The superintendent must organize his day so that for much of the time he is actually concerned with the teacher-pupil situations in his school. He must see classrooms in action and spend much time in discussing instructional problems with teachers, individually and in groups.

2. The superintendent must become a student of children, the principles of learning and the culture and community in which the child is growing up. In this connection the superintendent must survey his own provisions for in-service education. On the job he ought to read, observe and reflect. At times he will need to get away from the job for more intensive study. In all this effort he works not so that he can tell teachers what to do but so that he can make some contribution in a joint consideration of steps to be taken.

Must Recognize Principals

3. The superintendent should encourage the participation of all staff members in the formulation of policy. In the very beginning he must not ignore the school principals. He should select individuals who are capable in dealing with instructional problems and who can work cooperatively with a group of teachers. If the principals are inherited he will need to help them become competent in these matters. The principal must be recognized as the chief instructional officer in his own building.

It should be recognized that teachers know their own pupils better than anyone else knows them. This knowledge possessed by teachers should be utilized and extended. For the good of both the pupils and the teachers themselves there must be staff participation in developing policies. Bimson has made an interesting study on this topic and has developed some principles of participation that seem to be valid.

4. The superintendent must plan his program with the needs of teachers in mind. Prescott has classified these needs as of three kinds: physical, social or status and personal or ego-integrative. It can be seen that teacher load, participation and recognition are definitely related to these needs and that some of these needs might be met in groups. At times, however, teachers require consideration as individuals. An understanding of the needs of the good and the poor teachers ought to become a part of the working equipment of the superintendent.

Many times the in-service or professional study program of the system can be aimed at common needs. If, for instance, the unit type of teaching were to be adopted by a system, teachers would feel inadequate unless time and opportunity were provided for them to obtain a genuine understanding of what was involved in the new approach. The superintendent should counsel with teachers on his staff regarding summer school, travel and independent research so that they can become adapted and prepared for the work they have to do in the system.

Work Should Be Constructive

5. The program of supervision should be made creative and forward-looking rather than corrective or backward in concept. This does not mean that emergencies should not be met. Rather, it means that the emphasis is constructive and planful, not opportunistic. Thus, if discipline were a problem in a particular school the whole topic might be made a subject for professional study. Child nature might be critically reviewed; the curriculum and the daily regimen of the school might be appraised, and teacher personality and its influence on children might come in for examination. Conceivably, such an approach might give

teachers better understanding of the problem, which is the only sure way of improvement. Such a method seems far superior to a discussion with Miss Jones as to whether or not Johnny should have been sent from the room for disorderly conduct.

6. The superintendent should gain the confidence of the staff and of the community so that they move forward with the program. To do this he must be a follower as well as a leader. He will find it necessary to learn from his teachers and to listen to parents and patrons in the community. Both the superintendent and the members of his staff should participate in the activities of community organizations. Such a situation permits interpretation of the community to the school and of the school to the community, a process well described by Moehlman in his book on social interpretation.

7. The superintendent must work for a broad program of social welfare within the limits of the community and his job. Good schools cannot exist without public health agencies, library facilities and recreation opportunities. These programs must be made a part of a common front with public education whether they are handled by one or many public bodies. Only by so doing can the development of children in all aspects be assured. Thus, the superintendent and his staff, inspired by his example, must become champions of social welfare.

8. The superintendent should affiliate with national and state professional groups and encourage staff members to do likewise. Such activity would seem to be recognition of the fact that no community can lead other communities in the state or nation by too great a margin. While there can and should be individual adaptation, the destiny of education is a common problem. Furthermore, membership in professional organizations may furnish the motivation needed for one to do his best work or may give one status in a group, which seems to be a rather universal need.

9. The superintendent and his staff must engage in a continuous program of evaluation of instructional procedures. The evaluation technics as worked out by Tyler and others are of value in this connection. Such a program involves five steps, as follows: (a) setting up the objectives, (b) defining objectives in terms of pupil behavior, (c) selecting situations in which such behavior may be observed, (d) selecting or formulating instruments to record such behavior and (e) appraising the record. Follow-up studies of graduates might also be helpful in evaluating a school program. In any event such evaluation must be broadly conceived and cooperatively pursued.

In summary, it would appear that if superintendents of smaller schools followed these principles, supervision would come to mean more than occasional classroom inspection.

Americans Made in Milwaukee

"MILWAUKEE Public Schools Make Americans" proclaims the cover of the 1941 annual report of the Milwaukee public school system; this theme is elaborated in the unusual report, which, in the words of Supt. Milton C. Potter, "envisages the development of a way of free child life in free schools."

The progress of "Little Joe" in the Milwaukee schools is depicted by attractive black and white drawings and pungent, readable text which tells how Milwaukee trains its junior citizens in the way that they should go, with equal opportunity for all.

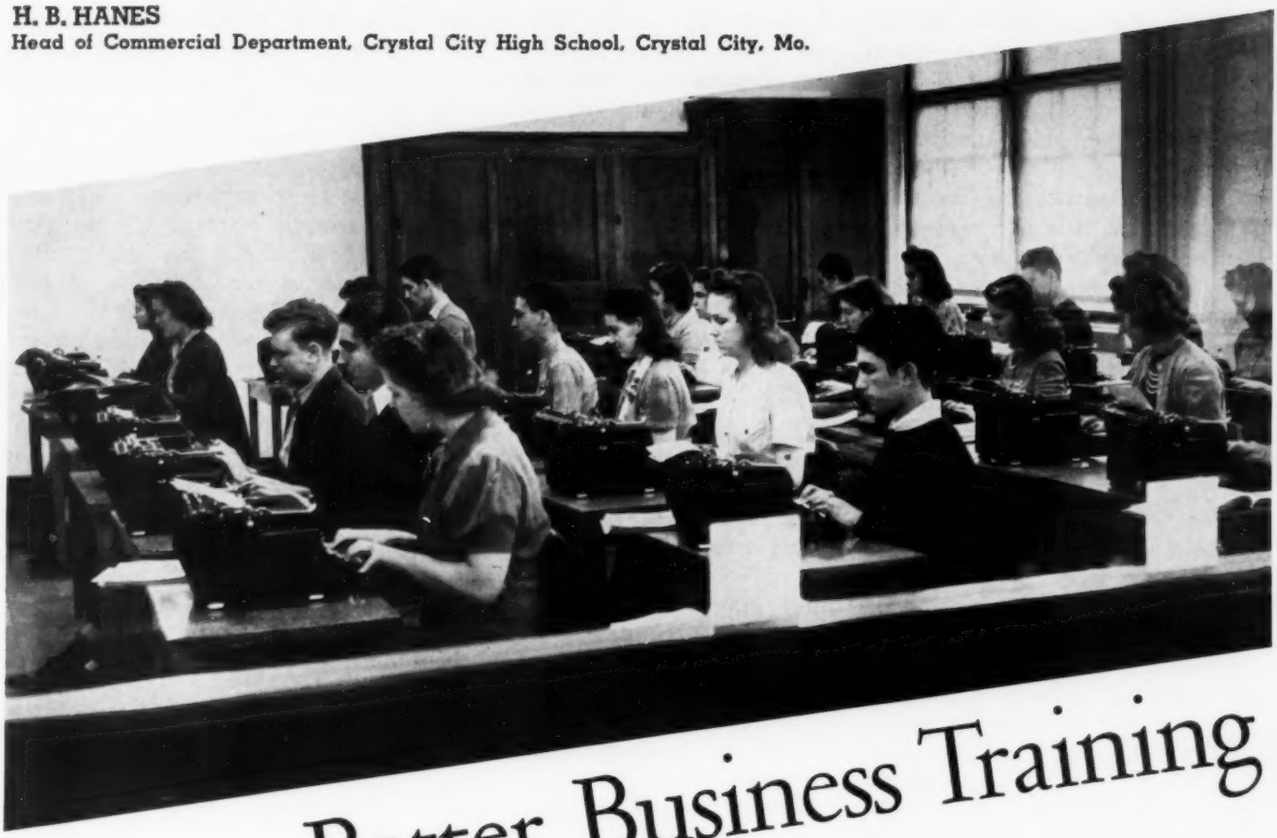
Little Joe's experiences contrast sharply with those of his two counterparts, "Guiseppe" and "Josef," who learn the fundamentals of fascism and communism in the schools of Italy and Russia as Joe learns the democratic way of life in America.

A summary of the rôle of education in the defense of America in particular and in democracy in general is presented in three brief essays entitled, respectively, "The Ramparts We Watch," "The Bargain We Get" and "The Milwaukee Public Schools Conserve Democracy."

16. THE MILWAUKEE PUBLIC SCHOOLS MAKE A UNIQUE CONTRIBUTION TO THE DEMOCRATIC METHODS OF TEACHING
Not in use
BEFORE and AFTER
Before and After WHAT?
Why, Library Technique,* of course. The made-in-Milwaukee, American, democratic way of teaching many subjects.
* Neither the title nor the method is copyrighted.
"THE MILWAUKEE PUBLIC SCHOOLS MAKE AMERICANS"

Before and after using "library technic," the method used in Milwaukee to teach reading skills and content studies. The technic is defined as "interest plus research prompted by the inner drive," and includes four basic steps: (1) establishing the interest leads, (2) developing the interest leads, (3) research and (4) recitation period.

H. B. HANES
Head of Commercial Department, Crystal City High School, Crystal City, Mo.



Better Business Training

IN PAST years all pupils who wished to do so have been permitted to enter the commercial field. Backward or retarded pupils, particularly, have been encouraged to take these courses, the purpose being to train them to use their hands inasmuch as they cannot use their heads.

However, times have changed. Jobs are harder to find, the employer is demanding better prepared workers and the requirements are greater than before. Therefore, greater selection is necessary in placing pupils in commercial courses.

It is important that pupils who take commercial subjects for vocational reasons be thoroughly acquainted with the vocational opportunities to be found in the community. They should know something of the qualifications required for employment. The curriculum offered should have a close relationship to what the commercial world requires. Too often in schools practices are adopted that are distinctly out of step with what is going on in the business world.

Before a pupil is permitted to enroll in the commercial department he should go into a conference with the instructor; if he happens to be a freshman, his parents or guardian should be present to take part in the discussion. In this conference one can find out the pupil's desires, his background and the desires of his family. The instructor becomes better acquainted with the family and can better guide the pupil, even laying out a four year course. If the instructor can visit in the home he can get still closer to the problem at hand.

A principal can do much to guide pupils into the commercial field by setting up and maintaining guidance charts of community occupations, stressing standards and personal traits. The administration is directly responsible for a guidance program because through it the course of study, counseling and research are developed and perfected.

The guidance program should include intelligence, aptitude and personality tests, as well as a consideration of previous marks in high school and grade school. Former teachers can give helpful opinions. If the home is in agreement with the program, better work and cooperation in guidance are assured. If something is known of the pupil's native ability or lack of it, he can be guided more intelligently. We must recognize individual differences and teach accordingly. Many pupils have the ability, but it must be awakened.

Crystal City, Mo., is a manufacturing center in which is located a large plate glass factory. Large numbers of clerks are employed and there is a demand for properly trained secretaries.

Officials of the plant are invited to talk to the student body. They outline what the plant expects of its employes and offer such information as they deem necessary to help pupils formulate their courses for the remainder of their time in school.

The school, in turn, cooperates with the plant and trains its pupils to fit into its office force. As a result of last year's discussions and a survey made in the plant, a comptometer course has been added and the curriculum will be further amended and improved as the needs in the plant arise. How often such local studies as these should be repeated will depend upon the type of industry, its location and the economic conditions in the locality. The school should ascertain care-

fully the types and number of jobs available and the annual turnover. It should be careful also not to allow the supply greatly to exceed the demand; pupils should be trained for a given occupation only if there is a reasonable opportunity for them to obtain that type of employment in the community.

A practical way of presenting the commercial department to prospective pupils is to have a party at the beginning of the school year. On this occasion a short entertaining program can be presented with pupils from advanced classes demonstrating the different machines in the department. The teacher, too, can hold a short recitation and demonstrate the work of the department, explaining what is expected of the new pupil.

It is recommended that the pupil who plans to major in accounting take extensive training in mathematics and economics. Those entering the secretarial field should first have mastered the fundamentals of grammar, spelling and ethics, and should certainly have acquired the ability to get along with people. All pupils, regardless of whether they are entering the commercial department, should be required to take public speaking. Generally speaking, a commerce pupil will not gain by a knowledge of Latin, but if he is entering the importing or exporting business a knowledge of Spanish, French or German will be helpful.

Each year our commercial classes are taken on field trips to points of interest. If a class is large it is divided and each group supervised by an older pupil. This trip is discussed in advance so that the pupils have some idea of what to anticipate. Upon returning, each pupil submits a paper on the things he considers most important. The teacher becomes better acquainted with the pupils on trips of this kind and the pupils have an opportunity to study at first hand actual places and conditions and to connect these with life situations.

Most modern classrooms contain one or two bulletin boards with material furnished by the teacher. This material should be changed often so that the pupils will keep watching the board for new items of interest concerning changes in the commercial field. They should be encouraged to bring clippings and their names should be placed on each article accepted. Thus, there will be developed good-natured competition, as well as pride in having their clippings displayed on the board. A short snap quiz on the material on the board may be given to encourage all pupils to read the material displayed.

An average job of guidance is not sufficient in developing personality. Each child should be studied and taught how to improve his good traits and to eliminate his bad ones. He can be given tests to ascertain his reactions to certain life situations; a study of the test results can be made and discussed with the pupil. A study, too, should be made of good manners, dress, voice, attitude toward life and social grace.

Still another field should be mentioned—that of character guidance. A child must get more satisfaction out of good habits than he does from bad ones if he is to practice them. Children learn morals in the same way they learn English or spelling, *i.e.* by use. Moral growth depends upon wholesome stimulation. This type of guidance has been left to the church, but in the majority of communities the church does not come in contact with all children and does not get as close to the child as his teacher should.

Book clubs, boy scout groups and similar organizations that appeal to a child are great aids in a character program. This program should lead to the development of proper health habits, worthy use of leisure time, character, personality and the ability to get along with others.

To teach successfully one must bring the instruction down on a level with the pupil and, with proper guidance, it is possible to group the pupils according to their natural ability. In small schools this can take the form of more individual instruction such as is being used at the present time during laboratory periods. We must develop the child's native ability, cultivate his personal qualities and traits and, thus, help him prepare himself to take his rightful place in society.

Crystal City High School pupils prepare to enter the business world.

The Society-Centered School

New Goal of American Education

MARCELLA ROSE KELLY
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AFTER nearly two decades of bitter bickering about the relative merits and demerits of conflicting public school policies and methodologies, there appears to be every evidence that educators and parents are beginning to see eye to eye regarding the new goals in American education. That is a good sign for all of us.

This year there can be no half measures. With old values dying almost hourly, more and more educators are coming to realize that, to be effective, education must be deeply rooted in the needs of its own day. America's needs today are peculiarly different—purely nationalistic on the one hand, yet internationalistic on the other.

This second stupendous conflagration in the history of mankind has brought the world to our doorsteps; it necessitates our keeping close watch on all fronts. It is a year in which America needs teachers who are Americans first in order to make first-rate Americans of her children.

Democracy Must Be Lived

The task that lies ahead for America is more than one of national defense. It is that of strengthening American education so that it can see the vital need for teaching the child to live the American way of life; to believe in it; to love it. It is going to be a difficult task. Many will make the mistake of trying to teach democracy by rote. It cannot be taught as communism is from the Russian primer; nor can it be superimposed as are nazism and fascism by a controlled system of public education, conscripted courses of study and a hand to mouth press. Democracy, if it is to survive in our own hemisphere, must be caught; it must be felt; it must be lived.

On the other hand, democracy cannot be achieved by the opposite extreme of allowing undisciplined freedom. Freedom in any sense is relative. Where it is irrelevant, there are chaos, uncertainty and general dissatisfaction. There must be no soil in the plain of American education fertile enough to propagate the seeds of anarchy. If progressive education has failed in the last ten years, it has been because of its failure to clarify democratic ideals in relation to its "learn to do by doing" program. The fault has not been, as so many critics would lead us to believe, with the setup of progressive education itself; it has been rather with the interpretation of that system by incompetently trained young teachers or by teachers who are old in service but insufficiently experienced in newer trends and methods.

Since the days when John Dewey and William H. Kilpatrick set out to raise the level of general education to the dignity of the common touch, many crimes have been committed in the name of progressive education. Some schools went to the extreme by allowing children to inject only their rights into the pattern of education as they saw it, forgetting that rights without duties are meaningless and empty. Our children, then, must be guided into seeing that freedom is desirable; that it is good; that it is a rightful and worthy democratic ideal. Yet our children, too, must be guided farther into a realization of the dangers of freedom.

This greater emphasis on democracy must develop largely from the situations inherent in the school environment and in the school program itself. These situations must approximate those of real life as they have never before in the history of American education. The child must see himself in these situations; he must be guided into recognizing the problems he has to face; he must be taught by the skillfully understanding teacher the American way of coping with his problems intelligently. These problems of the child must have the common touch; they must not be isolated, impractical or unrealistic. They should, to be effective, entail large areas of learning so that the learner can put the knowledges and skills to immediate use and at the same time build desirable appreciations and attitudes.

There should be more group work in schools for a democracy so that children can experience democratic participation and sharing and, thus, benefit from interaction with the group and one another. This newer educational program will make use of reading, writing, arithmetic (the old bones of contention), social studies, the elementary sciences, health, safety education and citizenship on the various grade levels, but not, as in the past, in isolated subject-matter fields.

Experimental School Set Up

An interesting experiment was recently carried on at State Teachers College, Fitchburg, Mass., by Mrs. Harrie Camp, principal of a public school at North Dighton, Mass. Mrs. Camp, a firm believer in the theory of the society-centered school, built a model store to show what could be done in the primary grades toward realizing the American ideal in modern education. Her plan was to organize the children into committees; build the model store, and then use it as a nucleus for education in arithmetic, languages, writing, health, science, spelling and reading.

A few of the activities involved were: using the telephone; making change; meeting customers; learning the names of foods; learning to order groceries for parents; learning the simple terms of measurement; learning the value of heat and cold to the merchant; listing healthful foods; listing a well-balanced meal; realizing how the merchant serves; realizing how the fisherman serves; learning to participate in group dis-

cussion; learning to cooperate with one's neighbor, and learning to appreciate the American way of life.

The elementary schools of the nation have been sensing the need for change since the early part of the turn of the century; in many respects some of them have been far ahead of their own time. It will, in the light of this fact, be easier for the grade schools to fall in line with the trend of the year—society-centered schools, schools in which the accent of education is on the place of the individual in the American scene. The same cannot be said of the junior and senior high schools or even of the colleges. Colleges have been hounding the senior high schools; "requirements of college entrance boards must be satisfied" has been their constant cry. High schools, in turn, have been pressing the junior high schools, and pressing them hard, crowding more and more isolated learnings into a curriculum that is already top-heavy and bulging. The result has been a kind of mass production in education that is certainly out of line with our needs in a world that is moving too fast.

The salvation of secondary schools for years to come will depend largely upon the active part guidance is allowed to play in the curriculums of the junior and senior high schools, and in the colleges, too, throughout the country. In the past, too many boys and girls have been poured forth from the secondary schools with nothing more than a meaningless sheet of paper as their springboard into life. The courses blindly accepted by them in high school, they soon found unrelated to actual living or to the competitive world for which they were completely unprepared.

America can no longer afford to turn out untrained youths from her secondary schools. The public schools have recognized the theory of individual differences, but mere recognition that the differences exist is not enough. Homogeneous grouping has never solved the problem completely and never will. Yet many of the schools have been operating on such fallacious reasoning. The schools must go farther. They must guide boys and girls into that group for which they are best fitted.

Many pupils of high school age, if properly guided, can be absorbed this year by the vocational and trade schools. American industry is going to need the best trained minds and hands of the country in order to integrate the defense program successfully; here, too, it is the responsibility of the schools to train for service. The idea that only the "white collar" worker is respected in the community must be broken down. With proper guidance, boys and girls can be directed to see for themselves that there are nobility and happiness in service, no matter how humble, if one is fitted properly for the job.

The time is ripe for reorganization of American education. The new program must emerge gradually and naturally under proper guidance. It must provide for the preservation of the personality of the individual and, at the same time, provide for guiding the individual into a realization of his place in society in order that that society, as we know it, shall not perish from American life.

How Democratic Are We?

RUSSELL TOOZE

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WE BOAST of having the most democratic educational system in the world. Dr. Walter A. Jessup, president of the Carnegie Foundation for the Advancement of Teaching, supports this contention in the foundation's annual report in which he states: "Never in history has a nation adhered more tenaciously to its purpose of providing an education open equally to all of its youth. . . . The United States educates not for the selection of an elite, but for the widest diffusion of understanding and knowledge."

Yet, in spite of the fact that we are educating for democracy, an appalling number of pedagogs throughout the country continue to employ dictatorial teaching methods.

For example, when the pupils enter the classroom at the beginning of the school year, the teacher lets them know from the outset that she is the infallible authority and warns them of what will happen to them if they fail to comply with her commands. By this time the pupils are so frightened that their mental faculties cannot function. Then, by way of subduing them completely, she bellows out the assignment—which she has been using for the last twenty years.

We tell pupils that they are free, yet when an instructor commands them to read a certain number of pages in a specific textbook, is she being democratic? Isn't it more democratic to set up a problem and let the pupils read until they have found an answer that satisfies them? The textbook is the saviour of many an instructor in our secondary schools. Day after day the teacher stands or sits before the class with a textbook in her hand, trying to "stump" the pupils with questions. And day after day the pupils sit before her writing notes, eating candy or reading magazines.

As the father of five children, I am much interested in teaching methods and I know from my own teaching experience that no teacher can really teach with her nose in a textbook. Her teaching material must be in her head; her personality should be richer because of her knowledge. The personality of the teacher means far more in the life of a pupil than any textbook.

The commonly accepted method of textbook teaching should be discarded in favor of the research method that will send pupils into the libraries where they will become acquainted with many books and authorities—not just one.

Any teacher who has used this research method soon realizes that the class belongs to the pupils and not to her. Pupils should be allowed to discuss problems that are vital to them instead of being forced to listen to commands, dry academic questions and lectures. Let us teach the boys and girls in our schools by letting them do things that they will have to do in real life. We should not shove material down their throats and then administer tests to see how much they have been able to digest.

Let the pupils' achievements be the measuring stick.

Home Influence on School Work

Survey of a Negro School

JOHN F. POTTS

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Low income and lack of education go hand in hand, according to the results of this survey of the Waverley Elementary School for Negro children, Columbia, S. C. The purpose of the survey was to learn the following facts:

1. The extent to which the families were broken.

2. The educational training of the parents.

3. The occupational history of the parents.

4. The average yearly incomes of the families.

5. The conditions existing in the homes.

6. The extent to which home conditions influenced attendance and disciplinary problems in the school.

THE Waverley School at Columbia, S. C., is typical of the colored elementary schools that are to be found in urban communities of the South. Although it is located in one of the more desirable Negro residential sections of the city, it serves a wide radius. Its enrollment includes children from some of the best Negro homes to be found in the South and those from the most destitute and undesirable homes. The majority of the pupil population ranges somewhere between these extremes.

Because of the extremely close relationship that exists between the home and the school with regard to the development of the child, a sociological survey was made of the school families.

A systematic method of contacting each home was arrived at by giving a questionnaire to each sixth grade child and then giving questionnaires to children in the lower grades who had no brother or sister in a higher grade. In this way 820 questionnaires were sent out, each going to a different home. Of this number 801, or 98 per cent, were returned. Most of these were completely filled out. The only item that a relatively large number of parents failed to answer was the inquiry into the approximate yearly income. Yet, even here, 747 of the 801 families complied.

The questionnaire was prepared in such a way as to require almost no writing. All questions except two could be answered by simply making an "X" or by writing a number. Only the questions concerning the type of work in which the parent is engaged and the name of the social agency from which he receives relief required answers in writing. Fourteen did not answer the question concerning occupations. Of the 97 receiving relief, only 25 gave the name of the social agency that was furnishing this aid. In both instances the failure to give the desired information was due either to the individual's unwillingness to give the facts or to his lack of knowledge concerning them.

The survey revealed that 350 of the 801 homes were broken. Of these 163 were broken because of the death of the father; 81, because of the death of the mother; 106, because the parents were separated. In 10 cases of this last group the parents were divorced; in 62 the father had deserted, and in 25 the mother had deserted. Attempts had been made to mend 78 of these 350 broken homes. In 40 instances the father had remarried and in 38 the mother had remarried.

Eight questionnaires were returned without the father's being checked as living or dead. It seems reasonable to conclude that this omission was due to one of two reasons: the child was illegitimate or the father had deserted and the family had lost all trace of him. The questionnaire did not inquire into the marital status of the mother and father before desertion. However, we may assume that in the 87 cases of desertion there was a great deal of illegitimacy. The large number of desertions may be attributed to the fact that South Carolina is the only state in the United States that does not grant divorces.

Of the 726 living fathers and male guardians only 101 had completed high school or had done any work above the high school level. Forty-four were high school graduates; 21 were college graduates; 14 had done professional or graduate work above the college level, and the remaining 22 had remained in school after graduation from high school but had not finished college. The largest number of fathers (91) dropped out of school in the fifth grade. Sixty-four per cent of them never got any farther than the seventh grade. Seventeen never attended school and 16 could neither read nor write.

The findings support the contention that girls remain in school longer than boys. Even though there are not so many college graduates among the mothers and female guardians as among the fathers and male guardians, more of them entered high school and more completed their high school work. Of the 752 living mothers and female guardians 317, or 42 per cent, received school training above the seventh grade, as contrasted with 263, or 36 per cent, of the fathers and male guardians. The largest number of mothers (98) dropped out of school in the seventh grade. Seven of them never attended school and 12 could neither read nor write.

At the time the survey was made (1940) 83 per cent of the fathers and male guardians were employed. Of the 528 who were employed, 453, or 86 per cent, had steady work. Of the 103 unemployed, 69 were receiving relief. Twenty-five of the 69 had W.P.A. jobs. It is significant to note that of the 723 mothers and female guardians, only 214 remained at home. The remaining 509 were either working or looking for work. Twenty-eight of the 63 who were unemployed were receiving relief.

Although the employment situation among Negroes in Columbia has improved since the collection of these facts, owing to the establishment of Fort Jackson and to the general improvement in economic conditions all over the country, yet the types of work in which Negroes engage have changed little, if at all. Of the 960 parents and guardians who answered the question regarding type of employment, 676, or 71 per cent, were either domestic servants or unskilled laborers. Fifty-eight were engaged in the professions and 37, in business.

Incomes From $250 to $1500

Of the 820 families queried, 747 gave the average annual income. One third of all the families represented have an annual income ranging between $250 and $500. Almost another third, 32 per cent, averaged less than $250 a year. The annual income of the other third was distributed as follows: 122 made between $500 and $750 a year; 175 made between $750 and $1000 a year; 34 made between $1000 and $1250 a year; 15 made between $1250 and $1500 a year, and 14 had an annual income of more than $1500.

Eighty per cent of the families whose children attend Waverley School rent their homes. Only 157 families live in homes owned by them. Of the 638 renters, 409 live in one-family dwellings and 129 in apartment houses. Four hundred and twenty-three of the 795 families have radios; 281 have bathtubs and running water, and 181 have automobiles.

In attempting to determine the extent to which poor home conditions have contributed to problems of attendance and discipline, a special study was made of the homes of 75 of the most chronic "problem children." Of these 75 pupils, 28 are attendance problems, 25 present problems of a disciplinary nature and 22 are both irregular in their attendance and trouble-makers. Fifty-five of these 75 homes are broken. The following reasons were given:

Death of father	25
Death of mother	10
Parents separated	9
Parents dead	6
Father deserted	5
Total	55

In 12 of the remaining 20 homes both parents are away from home all day at work. Two families reported that the mothers were away working and the fathers were unemployed. In only six homes out of the 75 was the mother there to care for the children. Four of these six were very poor homes with large numbers of children (five, seven, eight and seventeen, respectively) and the children were kept out of school to work to help support the families.

The fathers of these children averaged a fifth grade education; the average for the mothers was sixth grade. The families average six in number, with 17 as the largest number of children and two as the smallest. The average family income of this group is $450.

A summary of the replies received to the questionnaire reveals the following significant facts:

1. That the fathers have died twice as fast as the mothers.
2. That less than one tenth of the parents who are separated have obtained divorces.
3. That in almost 60 per cent of all the homes that were broken because of the separation of the parents, the father had deserted.
4. That the mothers remained in school longer than the fathers.
5. That 70 per cent of all the mothers must work, thereby denying their offspring the necessary care.
6. That only 15 per cent of the parents are skilled laborers.
7. That less than 4 per cent of the parents are attempting to conduct any kind of business.
8. That 71 per cent of the parents are either domestic servants or unskilled laborers.
9. That 65 per cent of all the families have an annual income of less than $500.
10. That only 20 per cent of the families own their homes.
11. That 65 per cent of the homes are without bathtubs and running water. (This survey was made before the completion of the Benedict-Allen Court, the second federal housing project in Columbia for Negroes.)
12. That 92 per cent of all the problem children come from homes where the mother is away during the day.
13. That 73 per cent of all the problem children come from broken homes.
14. That 90 per cent of the problem children come from the low income group.

Economic Level Must Be Raised

This survey indicates that the Negro schools cannot effectively develop desirable citizens unless the economic level of the Negro home is raised. So long as the Negro mother must leave her home to work as a domestic servant for meager wages (sometimes as little as $2.50 per week) to supplement those of her husband, so long will the Negro child be grossly neglected. It is surprising that Negro children develop as well as they do when they have so little contact with their parents.

The first requirement for an improved citizenry among Negroes is higher wages, especially in domestic and unskilled work. The second requirement is for Negroes to train themselves not only for the more lucrative jobs but also for the domestic jobs they now hold so that they can do better the work that they are already doing. Then, they will have a good reason for asking for higher wages. When and if the income of Negro families is increased, the city and state will benefit in the following ways:

1. Negro children will receive more adequate care.
2. There will be a greater incentive for Negroes to get special training.
3. The Negro adult will be a more substantial citizen because he can become a property owner rather than a renter.
4. There will be fewer desertions.
5. The Negro child will have a better opportunity to develop into a self-respecting, law-abiding citizen rather than into a juvenile delinquent, a criminal, a pauper and a great expense to the city and state.

How Hard Do Pupils Try?

Report on the Use of an Effort Grade

WILLIAM F. COMBELLICK
Principal, High School, Redfield, Iowa

IT IS unfortunate that there is a growing tendency in some schools to reward a pupil directly in terms of the effort required of him to attain a certain degree of scholastic perfection. In such institutions, a bright pupil must have mastered his studies after a fashion that is superior to the mastery gained by a duller pupil before he can expect the same school mark. The disadvantages of such a procedure become apparent when the pupil's record is examined after the completion of his high school course, for employers and college entrance boards are interested in a report on actual accomplishment, not on the fact that a pupil was at a given time "improving" or "working hard."

For this reason, it seemed desirable to find a means for reporting to parents on a pupil's effort at the same time that an adequate report on actual scholastic accomplishment is being given. In developing a device to accomplish this end, the assumption was made that the normal mark obtained by a pupil of given intelligence is acquired through the expenditure of a normal amount of effort. Therefore, it was arbitrarily decided that when a pupil is doing work comparable to that of other pupils of his mental ability he deserves a grade for effort that is equivalent to his academic grade.

His effort grade is then calculated by adding algebraicly to this basic figure, determined by his mental ability, an amount equal to twice his deviation from the basic figure. This procedure resolves itself into the following formula:

$$\text{Effort Grade}_{p_1} = 2G_{p_1} - M_{IQ_{p_1}}^{g}$$

The formula is to be read: the effort grade of a particular pupil is equivalent to twice the percentage grade of that pupil minus the mean percentage grade of the group of pupils with the same I.Q. as this pupil. The grades thus obtained will be roughly comparable to the school marks since they will fall in approximately the same range.

Table 1—Data for Superimposed Percentile Curves of Intelligence Quotients and Class Marks

Percentile Rank	*Intelligence Quotient*	*Class Mark*
99	129.21	94.41
96	124.08	93.51
90	120.35	91.68
80	114.54	89.43
70	110.58	87.78
60	106.71	86.55
50	104.19	85.23
40	101.88	83.58
30	98.82	81.99
20	94.02	80.49
10	88.89	78.39
4	82.74	76.17
1	76.68	73.77

If class marks are not being given according to a percentage system or some other system of approximately similar preciseness, the effort grade can obviously not be calculated within nearly so close a range. It may, however, be possible to make a computation that will give as fine a degree of measurement as the original class grade has offered.

The only problem that arises in the application of the formula given is the means for determining what academic grade may reasonably be expected of a pupil of given mental ability. This has been done for practical purposes by superimposing a percentile curve of class grades upon the same graph whereon a percentile curve of intelligence quotients has already been drafted. By reading directly down the ordinates, it is then possible to determine what scholastic mark may be expected of a pupil

LETTER TO PARENTS

Dear Parent:

The report cards that have been issued at this time bear two new figures. One of these has been signified as the "average," the other as "effort." The first is merely the arithmetical average of all the grades that a pupil has received during the current six weeks.

The effort grade has been calculated mathematically. It is not based upon the judgment of any teacher or group of teachers. It has nothing to do with deportment. It represents the ratio between what your child is doing in his school work and what he might be doing.

If the effort grade is below the "average" grade, the pupil's work should be considered unsatisfactory. There is need for improvement. If the effort grade is above the "average" grade, the pupil's work record may be considered satisfactory. It should be possible for any child to bring his effort grade to well above 90. The effort grade is always determined by the individual pupil's relative ability and serves as a true, though approximate, index to his relative endeavor.

This new figure will serve as the fairest means for comparing the work of one pupil with that of another. Ordinarily, class grades, as such, cannot be thus compared with fairness, because of the differing capabilities of pupils.

This grade has been issued in an attempt to help you understand your own child and his performance. We trust that its meaning will not be misconstrued. This number has nothing to do with final grades that will be used in calculating "passes" and "failures."

PRINCIPAL

who falls at a given percentile in the school population according to his mental ability. Such a procedure, when followed for a presumably typical high school group of more than 200 pupils, has rendered the results shown in table 1.

The purpose of this table is adequately fulfilled if decimals are dropped and the closest integer is used. Thus, a pupil with an I.Q. of 111 may reasonably be expected to earn a class grade of about 88, in which case his effort grade is the same. Should he earn a class grade of 85, his effort grade, by formula, will be but 82, because his deviation from the normally expected class mark is a negative 3 and the effort grade is to deviate from the normal by twice as much. But, should he obtain a class mark of 93, his effort grade should be 98.

While the medium grade and standard deviation for the class marks rendered in other school systems differ from those indicated in table 1, the use of these figures would not necessarily defeat the purpose of the effort grade. Relative "effort" would still be satisfactorily shown.

This system has been used in calculating an effort grade that has been reported to parents of pupils in the Redfield High School, Redfield, Iowa, for the last two seasons. In practice, it has been found that the effort grades distributed themselves according to normal probability; they fell within the approximate range of the class marks. Rarely has a pupil earned an effort grade of higher than 100 according to this system.

Table 2—Device for Determining Effort Grade for Pupil With Given Average Class Mark and Known I.Q.

Class Marks	*Intelligent Quotients*					
	90	95	100	105	110	115
95	..	..	..	..	..	99
94	..	..	..	..	..	97
93	..	..	..	..	98	95
92	..	..	..	98	96	93
91	..	..	..	96	94	91
90	..	..	97	94	92	89
89	..	..	95	92	90	87
88	..	95	93	90	88	85
87	..	93	91	88	86	83
86	94	91	89	86	84	81
85	92	89	87	84	82	79
84	90	87	85	82	80	77
83	88	85	83	80	78	..
82	86	83	81	78	76	..
81	84	81	79	76	74	..
80	82	79	77	74	..	..
79	80	77	75	72	..	..
78	78	75	73	..	..	..
77	76	73	71	..	..	..
76	74	71	69	..	..	..
75	72	69	..	..	..	..
74	70	67	..	..	..	..
73	68	..	..	..	..	..
72	66	..	..	..	..	..

When the effort reports were first sent out, the letter to parents shown on the preceding page was enclosed with the report card.

Pupils are frequently observed to give their first attention to the effort grade. Raising this becomes a matter of particular pride and the consciousness of its meaning seems to have been quite graciously accepted.

To facilitate office work in determining the effort grades of individual pupils, a table was set up that eliminated constant refiguring of the formula. Table 2 is a condensed form of this.

In order to read this table, the pupil's I.Q. should be located as nearly as possible among those listed across the top and his average class mark should be found in the column on the left-hand side. By reading across and downward the proper effort grade will be found at the intersection.

It has been found that less than one minute of clerical work per pupil is necessary to figure both the average and effort grades by means of this system. Certainly, when a subjective report upon the individual pupil's effort is being made, it must be necessary to devote more time than this to consideration of each pupil, while the chances of a fair accounting are not nearly so great.

Thus, at Redfield, we have maintained a policy of grading the individual pupil always on his actual academic attainment. We have endeavored to make the grade marks a true indication of work done. But, in the meantime, we have proffered an indication of the relationship of this accomplishment to what the pupil might fairly be expected to do. We have represented his relative endeavor in terms that any parent can understand and compare.

Technically, there is one rather significant objection to the use of intelligence quotients for high school pupils in the effort grade figuring. Since the age of pupils within a given class varies so, some of those who rate high in I.Q. may not have the mental maturity of older pupils who are given a lower rating, while the inverse of this may also be true.

I have tried to eliminate this difficulty by working directly with mental ages rather that with intelligence quotients. To do this, I have substituted for the I.Q.'s a figure that may be called a group mentality quotient, which is obtained by dividing the mental age of an individual pupil by the mean mental age of his group.

However, when the effort grades that are then obtained are correlated with those reckoned by using I.Q.'s, a coefficient of more than .90 is obtained. This means that for practical purposes the additional work involved in computing group mentality quotients will scarcely be worth while.

Planning Class Excursions

SUGGESTIONS for planning class excursions for elementary school pupils so that they will derive the greatest benefit from them were made by Inez Petersen, elementary school supervisor, Sioux City, Iowa, in a general circular issued by the superintendent's office to all Sioux City teachers.

Inasmuch as a properly organized excursion is an important and, frequently, an expensive activity, it should be planned in detail by both the teacher and the pupils, Miss Petersen pointed out. All excursions should be an integral part and an outgrowth of instructional activities.

Teachers who are planning excursions are requested to make a brief outline of their plans and send them to the superintendent's office at least a week before the trip takes place. The outline should explain the benefits that should accrue to the pupils in terms of concepts to be stressed, new experiences that will be gained and activities and skills that will be stimulated by the excursion.

In addition, the outline should state the arrangements that will be made with the parents and with the superintendent's office, safety rules that will be observed and the estimated cost of the trip.

Pupils' Needs Come First

Developing Good Teacher-Pupil Relationships

C. H. DORR, Superintendent of Schools, Milton and Milton Junction, Wis.

THE development of satisfactory teacher-pupil relationships necessitates describing the function of the school in terms of pupils' needs. Too frequently, this is not the case, with the result that many undesirable characteristics develop in pupils because they are frustrated and discouraged.

John Dewey pointed this out in 1931 when he said: "The titles we find in a school program, such as botany, mathematics, history and science, assume that learning is already at hand, set in proper summaries and needing only to be divided into proper doses. It is only too common to hear students (in name) say in reference to some subject that they 'have had it.' The use of the past tense is only too significant. The subject is over and done with; it is very much in the past. Every intelligent observer of the subsequent careers of those who come from our schools deplores the fact that they do not carry away from school into later life abiding intellectual interests in what they have studied."

In this connection, teachers have noted that pupils are apparently unable to adapt the subject matter learned in one course, such as algebra, for example, to other subjects or situations. Similarly, pupils in elementary schools are unable to use arithmetic effectively in their science classes, or spelling in their language classes.

Teaching Methods at Fault

Many educational leaders place the blame for this situation on the nature of the learning that takes place in the traditional school. They contend that this learning does not function. It does not function because of lack of motivation and this is due to a faulty approach as directed by our teachers.

If the school is to function for the child it must change drastically from what it has been in the past. It must change from a subject-centered school to a child-centered school. Teachers must be interested not only in whether the child learns history, arithmetic, geography or spelling but also in whether the pupil grows and gives evidence of an integrated personality growth.

The motives that act as individual drives are highly important clues as to the type of development the child is making. The teachers, according to Burnham, must be interested in the pupil's integrated personality growth. They must be interested not only in the physical growth of the child but in his mental growth as well. Teachers must master the fundamental rules of mental health and the application of psychology and good pedagogy to the process of teaching. They must study the child closely from all angles. They must attempt to look at everything from the child's point of view.

Questions to Be Answered

The school must, therefore, concern itself with such questions as the following: Is each pupil working up to his mental ability? Have all pupil interests been utilized? Has the child realized the satisfaction of success in his work? Does the child read effectively; if not, has something been done about it? Has the curriculum been adjusted to the child rather than the child to the curriculum? Is the pupil happy and encouraged in his school life? Is the child frustrated? If so, why? Teachers must concern themselves with obtaining full and complete information from every child. Insofar as possible, each child's individual needs must be recognized and ministered to. This should not be restricted to mere "lip service" but should be translated into constructive action.

It is evident that the teacher in this type of school occupies a far different rôle than in the traditional school. Burnham calls attention to the words of Comenius when he said: "Teach if you are cornered; otherwise, let the child learn." The teacher must forever remember that the spirit of the learner is a tremendous asset in learning. The child must derive satisfaction from his work. He must succeed and if he does not do so we must ascertain the causes and attempt to have them removed.

Burnham lists the essentials of the classroom as follows:

1. Give every child the opportunity to attain success. The child must succeed through the pursuit of a suitable task.
2. The teacher must take the pupil where he is and proceed from there. If this is not done, certain steps may be missing and he may experience frustration in his school life, will be unhappy and, therefore, unproductive of results.
3. Teachers should avail themselves of the knowledge of child psychology in dealing with the activities of the child.

Teacher Must Appraise Herself

In addition to these essentials, the teacher must learn to evaluate herself, insofar as her dealings with the pupil are concerned. First, she must ask herself the following questions: Do I make my class work living, vital and worthwhile for every single child? Do my energy, understanding and sympathy make experience and achievement in my field of real interest to the pupils? Do I, as a teacher, believe that education is truly significant? Do I have a spirit of self-confidence? Do I respond to intelligent criticisms and suggestions without offense? Do I treat my pupils calmly and impartially without projecting upon them my own biases and prejudices or using them as a means of solving my own emotional problems?

Many of the practices in the traditional school will be looked upon as

DESIRABLE TEACHING PRACTICES

1. The teacher is more interested in what happens to the pupil than in whether a certain amount of subject matter is covered.

2. The teacher finds something that the pupil does well and praises him for it.

3. The teacher is sympathetic and mingles with the pupils, thus obtaining their confidence.

4. The teacher does not resort to keeping pupils after school as a method of punishment. This procedure is not psychologically sound inasmuch as it causes pupils to dislike school work.

5. The teacher does not compare dull pupils with bright ones to the disadvantage of the former.

6. The teacher tries to understand and sympathize with the pupil and to interest him in school work on the basis of his own interests.

7. The teacher is enthusiastic. She stimulates new activities, makes new points of attack and makes the work interesting and vital. She evidences interest in every pupil.

8. The teacher does not use a "bag of tricks" but interests herself in a constructive learning program and uses new teaching devices.

9. The teacher attempts to learn why the child who is not mastering the work will not participate and, after discovering the cause of the trouble, adjusts the work to fit the pupil so that he becomes interested and succeeds.

undesirable if we are to proceed with this new point of view in our teaching. Some of the better practices are set forth in the accompanying list. These are indicative but not by any means exhaustive.

Discipline in the child-centered school is different from that in the subject-centered school. Discipline must not result from inconveniences caused to the teacher. The discipline of the child-centered school should be a means of motivating the child. There are two points of vital importance in this matter of discipline; one is the question of whether the child is engrossed in a task which to him is vital, and the second is the probability of success. The teacher must see that these conditions are met and the matter of discipline will take care of itself.

Many specialists feel that punishment is hardly likely to increase the child's enthusiasm for and interest in school. These authors say that punishment is arbitrary, many times does not recognize adjustment and, in general, does not accomplish its aims. The imposition of school work for punishment is not a sound procedure because it will probably cause the child to look upon school work as distasteful when just the opposite is desired.

Sarcasm and ridicule have absolutely no place in the school. Especially inexcusable is the practice of ridiculing a dull child and comparing him unfavorably with his more gifted classmate. Corporal punishment, according to many psychologists, obviously indicates a weakness somewhere. Educators formerly employed it a great deal, particularly when teachers were untrained and the prevailing technic was rote memorization and periodic recitation. When corporal punishment is used, it reflects on the teacher using it. It reflects on the teacher because the infliction of corporal punishment indicates a lack of desire on her part to study the pupil thoroughly and to help him adjust himself to the school work.

The teacher, first of all, must study every individual pupil. She must determine what each child's possibilities are and then must suit the instruction to the child. The useful materials and information to collect for each child, *i.e.* intelligence test scores, college aptitude test scores, reading test results, achievement test results, past records in school, past cumulative records in school, interests and dislikes must all be searched for possible clues as to how best to deal with the pupil.

Frequently, intelligence test scores are resorted to by teachers as an excuse for failure to do better by a certain child. This is inexcusable. Study the child continuously in an effort to find his potentialities. Then suit the teaching to his potential mental strength and interests. A great deal of effort should be directed to the objectives of "wanting to learn." The subject matter of the course is a means to an end, not an end in itself.

After the teacher has learned all she can about the individual pupil, even to the extent of learning what his home environment is, she should attempt to individualize the instruction for this particular child as far as possible.

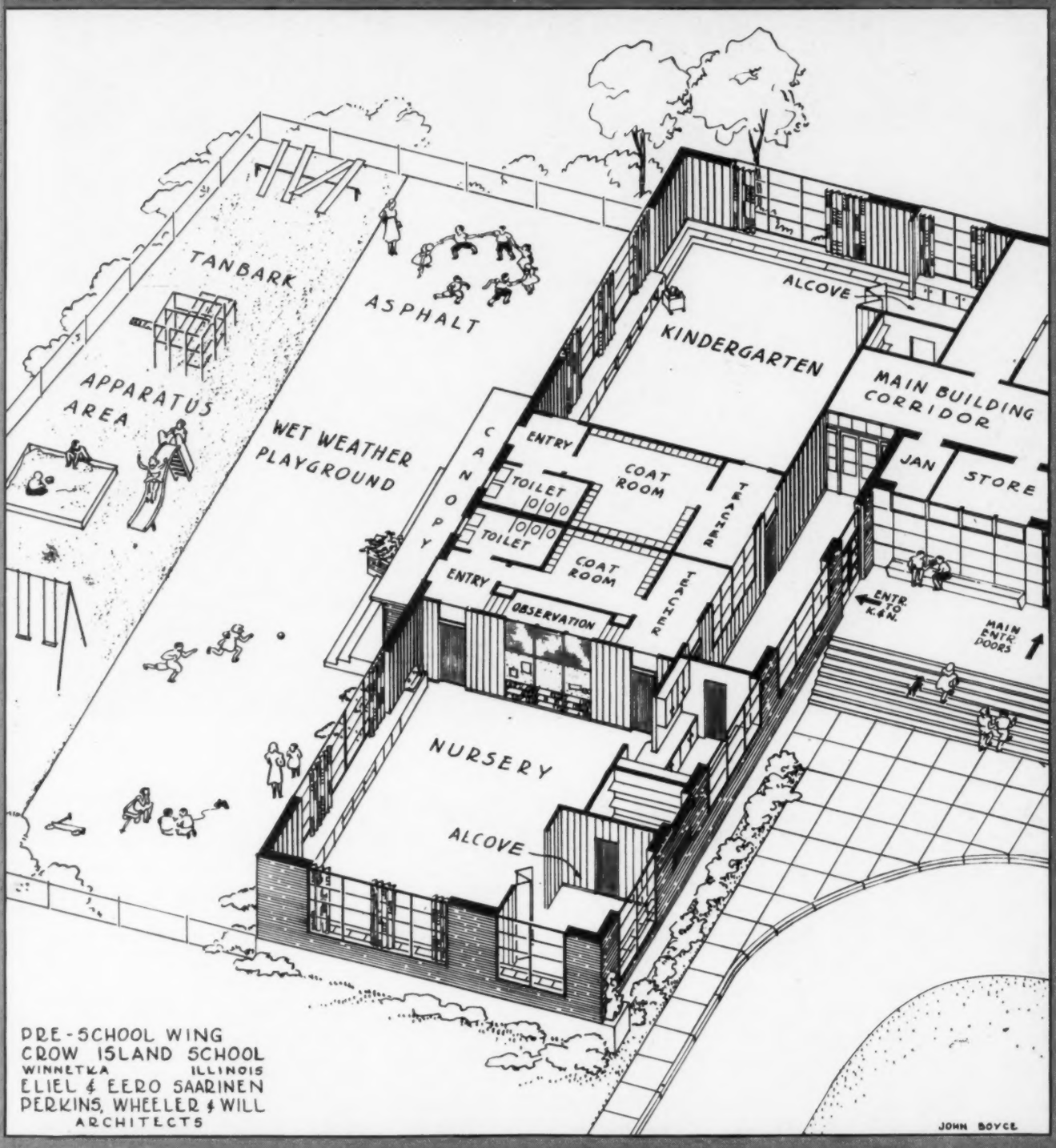
Above all, the teacher must make certain that the child succeeds, that he acquires mastery. If this is done the child will be happy in his school work. He will develop and grow; he will cease to give trouble. These results cannot be achieved, however, by expecting a child who has the ability to jump over a 3 foot mental hurdle to make the same growth as one who can jump over a 6 foot mental hurdle. The curriculum must be adapted to the child.

Ryan cautions teachers to make certain that they have a healthy mental outlook themselves, asserting that: "emotionally unstable teachers tend to have associated with them children who tend toward instability, whereas emotionally stable teachers tend to have associated with them mentally stable children."

A common response from most teachers will probably be: "This is all very well, but when will we have the time to do all this?"

Here, again, the teacher is probably thinking in terms of subject matter to be covered instead of in terms of pupil growth. Also, the convenience of the teacher herself is probably coming in for some consideration. We must think in terms of the proper development of the child.

Teachers who have tried this method of adjusting the curriculum to the child will not return to the old way of doing things for any consideration. Teaching with the approach suggested here will give teachers satisfaction in their work and will make them feel that their teaching really amounts to something. Only in such circumstances will the teacher feel that she is a positive influence in the life of the individual child.



Pre-Primary Portfolio

Educating the Young Child

RUTH UPDEGRAFF

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THE young child is a person. He is a rapidly developing and changing individual, experiencing the most formative and, therefore, the most important years of his life. His gradual inculcation into the particular culture that surrounds him and the adjustment of his fundamental physiological and emotional needs to the demands of that culture not only bear a tremendous significance for his future but have a conscious reality and seriousness for him that we adults realize only through the intensity of our own earliest memories.

These interrelationships begin with the life immediate to the child, the life of his family, and as he grows older they increasingly reflect the areas of society that he and his family touch. It is fortunate that scientific affirmation of the importance of these earliest years has come at a time when the complexity of human life has been intensified. It is significant that that very society is coming to realize its responsibility wherever it is in contact with the young child.

A hundred years ago childhood education would have applied at its very earliest to the first grade. Even seventy-five years ago the kindergarten and the 5 year old child were trying their educational wings together. Today, a discussion of trends in early childhood education does not even have to stretch to include the 2 year old. This is not a shift in emphasis, however. It is only that younger children are included in the continuum which now, in its most technical sense, includes nursery school, kindergarten and the primary grades. Moreover, the lengthening of the age range that is covered by the term "early childhood" is only part of the changing story. One of the most significant trends in this field today is the seriousness with which social institutions of a wide variety are considering their responsibility toward the development of the young child.

The attempt to analyze and interpret new developments and tendencies in early childhood education brings to a focus the fact that for the most part organized activities

Opposite Page: Three year olds, University of Iowa. Above: Harlem River Houses school, conducted by New York Kindergarten Association. Right: Ruddy specimen of the two year old group at University of Iowa.

directed toward educating the young child are closely integrated with developing philosophies of child growth and training. For example, the belief in the extreme importance of early influences had expression in the founding of the early nursery schools in centers in which there was active and convinced support for the study of child development. That consideration of the young child is a community, as well as a family, responsibility is demonstrated by the real sponsorship afforded W.P.A. nursery schools through the numerous organizations and individuals in the communities that operate them. The delineation of trends, therefore, is complicated by the close intertwining of activity and thinking. Such a situation is entirely wholesome and discussion will only serve to bring into relief one or the other aspect, *i.e.* theory or function.

It has quite consistently been a tenet of early childhood education that the growth of children will best be furthered if all persons responsible for their guidance, not only teachers, are thoroughly familiar and conversant with the facts of child development. It has seemed obvious that a knowledge of the path of development followed by children in general should make for better understanding and for more intelligent teaching and care. To be conscious of the many aspects of children's growth, to know not only limitations but also expectations, has been felt to be highly desirable.

The study of child development is young, however, and it is possible that in the attempt to develop measures and means of study there has been the inclination to apply information concerning general tendencies too rigidly to the interpretation of findings concerning the specific child. In spite of strong convictions concerning the existence of individual differences, there has been too little knowledge to account for them. One of the most hopeful emphases in child development circles today is the increasing number and variety of studies directed toward the scientific investigation of how differences among children are and can be brought about. In addition to enabling those who influence the child's environment to become more sensitive to its play of effects, these studies and the ideas responsible for them may also have a general outcome in the removal of certain undesirable pressures that result from society's unconscious pronouncement: "you should be like others."

In all of this thought and study concerning the young child, there are reiterated consistently and frequently such phrases as "the child in his setting" and "there is no knowing the child unless we know also his home and his community." Such a point of view expresses the belief not only that the forces of the environment are multiple at any one time but that the child is the product of past influences.

The child has fundamental needs. Such physical needs as those for food, rest and sunlight are as familiar as are the results of being deprived of them. More subtly defined needs, however, such as those of an emo-

tional nature, are not so commonly known. For example, the fact that it is extremely difficult for an individual to maintain his emotional equilibrium if he continually feels inadequate is well established. Children need the security that comes from feeling loved and appreciated; they need the feeling of belonging. And frustration of the individual by a failure to have these and other needs appropriately satisfied affects the whole sphere of his activities.

The results cannot be seen directly; to illustrate: an insecure child may act shy or, on the contrary, may appear aggressive. The key to his behavior lies in a study of his entire setting; real change can come only through a change in that setting.

Early childhood education has held this point of view and is continuing actively to attempt to utilize its findings and conclusions thoughtfully. In so doing it has come to the realization that in centering attention on the child, in pointing out the extent to which he is a reflection of the attitudes and actions of those about him, there has been, perhaps, insufficient realization of the pressure thus put on parents, teachers and others who are conscientiously trying to work constructively for his development.

Home Tensions Affect Child

A fairly large number of studies has indicated a relationship between emotional tensions in parents and behavior that denotes emotional stress in their child. While there is a question whether schools should equip themselves to undertake psychiatric guidance of parents whose problems are those of adulthood, it is clear that a recognition of the existence of such tensions and their effect on the child is important. It is important in understanding the child. More than that, it is important that the school try not only to avoid creating more worries for parents but, through wise study and care of the child, to create within its sphere an area of security.

There is much, also, that the school can do in fostering for the parents social contacts with others who have common interests, in providing interests and in offering to parents the real satisfactions that accrue from a constructive, informed, understanding attitude toward their children. Nor can the significance of normally balanced, full and happy lives for teachers be forgotten or ignored, as has been the case all too often. The personality of the teacher makes or breaks the school and in addition to her more specific professional ability she, along with the children, needs security, the opportunity to have and develop broad interests, the satisfactions of a full life.

Earlier in this discussion it was stated that social institutions of a wide variety are undertaking responsibilities directed toward the development of the young child. This has seemed a direct and natural outgrowth of the awakening realization that many of the child's characteristics are determined by the time he is 2 or 3 years old.

The nursery school, the most recent extension downward of school education, is of all groups organized for children of preschool age the best able to offer complete and varied opportunities for growth. By reason of its early sponsorship by scientists and educators who insisted on high standards of personnel and equipment, the values of nursery school education quickly became apparent. Holding from its beginning the purpose of supplementing the home instead of substituting for it and the philosophy of study and guidance of the individual child, it has been maintained that the kind of early experience thus made possible for a child offers opportunities for development that are far beyond those of most homes.

Both empirical and experimental evidence has attested the value of good nursery schools, and the increase in their number and their supporters is tacit evidence in the same direction. The establishment of nursery schools throughout the states, first, under the sponsorship of federal emergency relief and, subsequently, under the Work Projects Administration, not only has immensely extended this field but has demonstrated through successful practice the many ways in which the nursery school functions to aid and integrate both family and community life.

From Teachers College, Columbia University

Under this program the children of families on relief have been reached; in many places nursery schools are available for children whose families can afford to pay private school tuition. For the millions of young children who have not been reached and for the 5 year olds in cities that have school systems without kindergartens, additional provision must be made. In the last five years a few of the larger cities have opened nursery schools supported by public funds. This is only a beginning.

Defense Creates New Problem

It is difficult to differentiate among various types of groups for young children—to say, "here is a nursery school; there is a day nursery; here, a play group; there, a kindergarten." Differences lie not in sponsorship but in the type of experiences in which children participate. For the purposes herein concerned, however, it is the variety of sponsorship that is of interest. Wherever the development of young children is being fostered, there is early childhood education. It can now be found in groups located in medical and public health clinics, in hospitals, in child guidance centers, in churches, in housing projects, in adult education groups, in recreation centers and in many projects sponsored under the heading of social welfare.

Probably, the newest development has been the sudden emergence of problems of child care brought about by the shift of population involved in national defense measures and the consequent problems in health, housing and education. To help meet this emergency for childhood, there are now under way "child development defense groups."

The young child is the hope of the future. With the help of society, he will come into his own.

We Need More Pre-Primary Schools

MARY DABNEY DAVIS
Senior Specialist
Nursery-Kindergarten Primary Education
U. S. Office of Education

KINDERGARTENS and nursery schools for children below the age of 6 are founded on the idea that each child has the right to a fair start in life. This implies that certain circumstances under which living and learning take place are better than others, that these circumstances make a significant difference in the kind of start a child makes in life and that this start influences thinking and behavior in the years that follow.

Our first record of a nursery school in the United States is given in Robert Owen's scheme of 1825 for improved family and community life. Coming to America from an English industrial town, Owen explained his program to interested groups, including federal officials, as a plan to improve family housing conditions, abolish child labor, establish a form of social insurance and develop a method of education adjusted to individual children's needs. His experimental community was set up in New Harmony, Ind., and included a nursery school for a hundred children, taught by a student of Pestalozzi.

Some influence from this social and educational experiment may have affected announcements appearing about 1830 in which the Boston Infant School advocated "the benefit of instruction" as soon as children were able to walk to the schoolhouse and the primary departments of the New York public schools were reported to receive children at the age of 2. There is also evidence from the early records that more than book learning entered into the school program of these young children: "formal lessons" were to be avoided. "Affectionate and judicious treatment of individuals" was to be substituted for "general laws and penalties." Suitable playgrounds, playrooms and furniture "conducive to health and comfort" were advocated.

Photograph from National College of Education, Evanston, Ill.

The child's needs and interests are stressed in the kindergarten program.

The development of our present kindergarten and nursery school programs started at different times and in different ways. The kindergarten was introduced in Wisconsin in 1856 by a student of Froebel's educational methods, a refugee of the German revolution of 1848 who wanted a school for her young daughter. The nursery school developed about 60 years later based upon the MacMillan program for underprivileged children in London and upon the findings of an expanding body of research on conditions affecting all phases of a child's growth and development.

Interest in the first kindergarten led to the opening of schools both for children of the well-to-do and for those of the immigrant laborers who entered the country during its period of industrial expansion. Supported by philanthropists or by tuitions, the kindergarten continued for some time to serve the two ends of the economic scale. Care of young children from the rapidly increasing foreign population was made a spearhead in the Americanization work with foreign-born citizens. The teacher's morning was spent with the children and her afternoon, in visiting the families, teaching parents the rudiments of child hygiene and helping them solve their family problems. This was the beginning of parent education.

The first public school kindergarten made available for children of all economic levels was organized in St. Louis in 1873. A kindergarten demonstration at the Centennial Exposition of 1876 resulted in a rapid

Photograph from Teachers College, Columbia University

The nursery school program is a basic step for postwar reconstruction.

increase in the number of public school systems that accepted the program. The record of enrollments reported to the federal Office of Education shows 1252 children in the year 1873; approximately 17,000 ten years later; 225,000 in the year 1900; 600,000 in 1924, and a peak enrollment of 750,000 in 1930. Affected by the reduced birth rate, as well as by economies in school budgets during the depression, the 1938 enrollment reported for public and private kindergartens was approximately 650,000 children. This figure represents less than a third of the 5 year olds throughout the country.

The firmness of the foundation laid for these kindergartens is shown by the initial efforts and success in providing trained teachers, by the development of a professional organization for workers in the kindergarten field to help maintain high standards of work and by an integrity in facing and meeting problems.

Steps that are being taken today include the preparation and certification of teachers to cover both kindergarten and primary grade work, the provision for small group work within the classrooms, records of individual development, the limiting of kindergarten enrollment to 5 and 4 year olds, adapting the school program to children's interests and needs and the organization of kindergarten-primary grades into a "primary unit" through which a child progresses at his own rate of development. Major problems persist. What can be done for the 5 year old in the rural school? How can we remove the obstacles that prevent 4 and 5 year olds from sharing in public school funds?

Many and varied interests in the welfare of infants and young children converged in developing the nursery school program. Enumeration of some of the agencies and services for children that were represented at the national conferences on nursery education gives some idea of the cooperative movement sponsoring it, *i.e.* teachers of young children and adults; psychologists and psychiatrists; pediatricians and nutritionists; social workers; public health officers; those interested in family welfare, family housing, community recreation, delinquency and exceptional children, and designers of children's clothes, furniture and play equipment. Each one contributed, evaluated and readjusted his ideas to help improve the service for young children and their parents.

Factors that stimulated this interest included both the mounting body of scientific knowledge about children's growth and development and the movement of population toward cities that placed certain economic and social limitations upon family life, reduced play space for children and increased their safety hazards. More mothers obtained employment outside the home and the demand grew for supplementary care of children and for guidance in parenthood.

The organization of centers for study in child development anticipated the need for guidance technics and provided leadership for the development of nursery school education.

Among these centers was the Iowa Child Welfare Research Station, established by legislative act in 1917 to give the normal child the benefit of scientific study with respect to his development "in body, mind and spirit and gradually to evolve a science of child rearing by accumulated, comparative data and by intensive study of selected groups carried on through the years under natural conditions and in a controlled environment." Other centers include the Merrill-Palmer School, the Yale Psycho-Clinic, the Nursery Training School of Boston and the Bureau of Educational Experiments. Through foundation grants, centers of research in child development were established in many universities and colleges and in other strategic places.

Reports have shown that the nursery school serves as a home supplement in tuition and philanthropic schools; as a laboratory and demonstration in universities, colleges and high school departments of home-making, and as a service in the convalescent wards of children's hospitals and institutions for handicapped children and orphans.

Beginning with a report of four nursery schools in 1920 the number increased slowly to about 250 in 1936. An estimate for 1941 would be many times that number. A great impetus was given in 1933 when the Federal Emergency Relief Administration included the nursery school among its educational projects. The program was designed to provide employment for teachers and other needed workers and to help combat the physical and mental handicaps imposed upon young children by conditions existing in the homes incident to economic and social difficulties.

Leaders assisted in formulating working plans to organize these "emergency schools" and to help safeguard the educational standards for work at this age level that had been so carefully developed. Colleges and universities generously contributed staffs and facilities for short-term training of "relief teachers." Placed under the sponsorship of state and local public schools, between 1500 and 2000 nursery schools have enrolled each year approximately 50,000 children of 2, 3 and 4 years of age, representing needy families in all occupational groups. The program has included guidance for the children's parents. It has given employment to teachers, nutritionists, nurses, social workers, general helpers and young people registered in the National Youth Administration program.

As was the case with the kindergartens, many problems arose in the nursery school program. Again, the preparation of teachers was a major concern. In many places it is still a problem. Reports for directing-teachers a few years ago showed that slightly more than two thirds had earned college degrees, a larger proportion having master's and doctor's degrees than was reported the same year for elementary and high school teachers. The question of standards has also been faced and publications on "Essentials of Nursery Education" and "Some Ways of Distinguishing a Good Nursery School" have been provided to help differentiate between the educational program of the nursery school and the child care program of informal play groups and day nurseries. Cooperation has consistently been maintained among the various types of services that have a vital interest in promoting the nursery school program.

There is no question but that during the year of its development the kindergarten program has had a marked influence in adjusting the major emphasis in the primary and elementary grades from subject matter to children's needs, interests and individual rates of growth. Nor can it be doubted that the nursery school in its brief history has definitely influenced the schools' program of permanent records of pupils' growth, as well as its recognition of effects upon a child's learning of proper food, adequate sleep and happy home influences. It has also pointed to the need of adding mental hygiene to the teacher's preparation and stressed the need in high school for preparental guidance.

A major question is still to be answered. If what we say is true, *i.e.* that the circumstances under which we first grow and develop as young children materially influence the amount of intelligence and the social attitudes we express as adolescents and adults, then what stands in the way of giving every child an opportunity to benefit from a type of education that will help give him a fair start in life?

England is carrying on her nursery school program in evacuated areas and the Ministry of Health is allowing the appointment of trained teachers for day and residential nurseries in industrial and needy districts. Australia is in the middle of a five year federal program of preschool education with nursery school and kindergarten centers operating in the capital city of each state for research in child development and as health, welfare and educational demonstrations.

In our own democracy recent school surveys point to children below the age of 6 as a group for which educational opportunities are not adequate. They emphasize the need of nursery schools and kindergartens "to forestall the physical, emotional and intellectual impoverishment of young children whose families do not have the economic or educational means adequately to meet their needs."

Is not such a provision an economy and a conservation of human resources? Is it not, in effect, a first line of national defense and a basic step for postwar reconstruction?

Outline of Kindergarten Unit

LOCATION

Ground floor with separate entrance if possible, convenient to kindergarten play area.

South, southeast or east exposure.

Not below outside grade on those sides that contain windows or outside doors.

Main Room

From 30 to 40 square feet per pupil.

Scaled and decorated for young children.

Built-in display counters, pupil lockers, bookshelves, work benches and tables. Abundant built-in storage shelves and cupboards. Filing case, paper trays, cot or sleeping mat storage. Aquarium and fireplace desirable. Tackboard but little or no blackboard. Drinking fountain.

Activity Alcove

Open for visual supervision from main room.

Work benches, storage shelves and cupboards, work sink, clay bin.

In large kindergartens having two teachers, this may be separate room designed for noisier and more litter producing activities than main room.

Kitchenette

This may be a separate room, an alcove off the main room or only a portion of an alcove or main room set aside for hot plate, sink and dish storage.

Toilets

One acceptable, two desirable. Each with one water closet and one lavatory. Small fixtures.

Cloak Room or Wardrobe

Convenient to outside entrance. Equipped with hanger rod and hangers, placed low.

Storeroom

One for outdoor toys and building boxes convenient to playground entrance.

One for bulky types of indoor equipment, such as construction blocks, cots, looms and supplies.

Play Yard

Set aside from rest of school yard. Sunny exposure, sheltered from winds. Hard surfaced in part.

LARGE SCHOOLS

Large schools may need two or more kindergartens as above but with a common kitchenette, toilets, play yard.—*School Building Code, Connecticut State Department of Education.*

IRMA UNRUH
Supervisor, W.P.A. Nursery Schools
Detroit and Wayne County

Nursery Pupils Go

"TONY likes school," said a father to the visitor as he waited outside the nursery school entrance for Tony to finish his nap. "They have everything nice there, pies and cakes," he added in answer to the visitor's inquiry as to why Tony liked school.

Pies and cakes meant everything nice to Tony's father. Will milk, vegetables and fruit mean everything nice to Tony, because as a youngster in the nursery school he learned to eat these foods attractively served in an atmosphere in which others were learning too?

This is why nursery schools have included feeding of children as an essential part of their educational program.

If healthy, happy children indicate program success, these schools have every reason to feel encouraged. For even after a short period in nursery school, parents report that their children eat better and seem happier. The children look forward to mealtime in nursery school as one of the pleasantest times in the day's experience. The general rule is "willingly to meals"; this is not a time for conflict between teacher and child, as is sometimes the experience of preschool children and parents at home.

Let's visit a nursery school and see for ourselves.

Soon after the children's arrival in the morning, a tray filled with glasses of fruit juice and cod liver oil and a basket of paper napkins are placed on a low table. The tray speaks for itself and soon the children are gathered around the table. Each one helps himself to a glass, drinks, wipes his mouth, puts the used paper napkin in the wastebasket and goes back to play.

Now we go into the dining room where the 4 year olds often help get ready for lunch. Mary and Paul are setting the table. John and Joe are spreading the butter on the bread for the sandwiches; Ethel and Lorraine are shelling peas. It is fun to help, especially when they work together.

Here comes a group back indoors from a strenuous morning on the playground. They have hauled boxes, climbed, jumped, run and been as active as only the very young can be. They bring the wagon back into the schoolroom, put away the wheel toys and get ready for lunch. Some are tired and others are still hopping on one foot, eternally active.

The gay oilcloth covers make these little tables cheerful and inviting.

It is quiet and cool in the restroom and while some children wash others look at books and others rest on cots. This short rest period provides the relaxation necessary before meals. And now, all washed, they go into lunch, with eager curiosity as to the surprises in store.

Today the children have scrambled eggs, diced onions in tomato sauce, carrot strips, whole wheat bread and butter sandwich, milk, fruit cup and cookies.

On the bulletin board near the door is posted the week's menus. Here the parents stop and consult it so they will not duplicate the food served at lunch at supper time. And here they get new ideas for feeding other members of the family. The accompanying menu for a week is typical.

How attractive the tables are with their gay oilcloth mats and small plants in the center. Each table seats five children and a teacher. Chairs and tables that fit them and small knives and forks provide the comfort that growing children need. The opportunity to pour milk, pass sandwiches and take the empty dinner plate to the serving table pro-

After the morning's play, hands are washed and then it is time for lunch, nursery pupils learn.

Willingly to Meals

Eating outdoors in pleasant weather adds to the enjoyment of the meal.

vides for short attention span and prevents fatigue caused by sitting longer than active muscles should.

Notice the children as they go up to the serving table for their plates. In this school there is a waiter for each table who brings the plateful of dinner to each member of the group. Servings are of various sizes, depending on the appetites of the children and their familiarity with the foods served. A small serving of new food is a far more effective method of encouraging its trial than a large or regular sized serving. As each child finishes his main dish he takes his plate up to the serving table for seconds or for his dessert.

Sometimes a combination of self and family service is used. The family service is recommended for the younger children. Occasionally, to encourage greater consumption of vegetables, a dish of vegetables is placed on each table so that each child may help himself to seconds.

Listen to the buzz of conversation at the tables. The older children manage to eat and talk in quite an adult fashion, but the younger ones are quieter for it takes most of their energy to manipulate the utensils.

Notice, too, the individual difference in the handling of utensils. See the two year old next to the blonde teacher. She is using both hands and is managing nicely. The fat boy at the right manages best with his left hand and there is another eating with a spoon instead of a fork. Give them time in a pressure-less mealtime atmosphere and they will naturally develop at their own rate.

The expectant attitude of the teacher is a fundamental part of the atmosphere conducive to healthy attitudes toward food. A casual acceptance of a child's negative attitude which he often brings with him as a result of mismanagement of the mealtime at home is one of the first steps in promoting a more desirable attitude.

The wise teacher makes use of strategy as well as of her knowledge of children in helping children benefit from good food. The poor eaters are mixed with the better eaters and friends sit next to each other. School gardens have been effectively used to stimulate interest in raw vegetables, and visits to the grocer is an equally effective activity.

"Please" and "Thank you" are said by the teacher in speaking to the children but are not required of the children for it seems best to learn the give and take of social relations before insisting on adult patterns of social usage. No need for conforming to adult patterns too soon. There is no waiting until everyone is finished before leaving the table, for the individual pattern provides the rule. As each child finishes he wipes his mouth, puts his utensils on the serving table and goes to the toilet before returning to the nap-room for his long afternoon sleep. When he wakes it will be time for his afternoon snack of a glass of milk and a piece of fruit.

At 3 o'clock the child is ready to go home. During the six hours of his school day he has had one half of his day's supply of food. The emphasis has been placed on providing those most essential to his growth and on the protective foods that he is not likely to get at home. For, if he comes from a home in which the food budget is limited, bread, potatoes and a little meat may be the acceptable food pattern.

As the mothers become familiar with the school, they gather together for meetings at which food for children is discussed. They also learn newer ways of preparing foods so that eventually even Tony's father may think that fruits and vegetables can be as nice as pies and cakes.

Menus for One Week

MONDAY

Meat balls Tomato sauce
Green beans Parsley sprig
Graham muffins Milk
Chocolate cereal pudding

TUESDAY

Creamed liver Boiled rice
Buttered carrots and peas
Cabbage sandwich Milk
Diced bananas in orange juice

WEDNESDAY

Cooked vegetable salad with hard cooked egg
Stuffed baked potato
Toasted cheese sandwich Milk
Applesauce Ginger cookie

THURSDAY

Sliced sweet potato Bacon strip
Buttered spinach
Orange and pear salad
Bread and butter sandwich Milk
Baked custard garnished with jelly

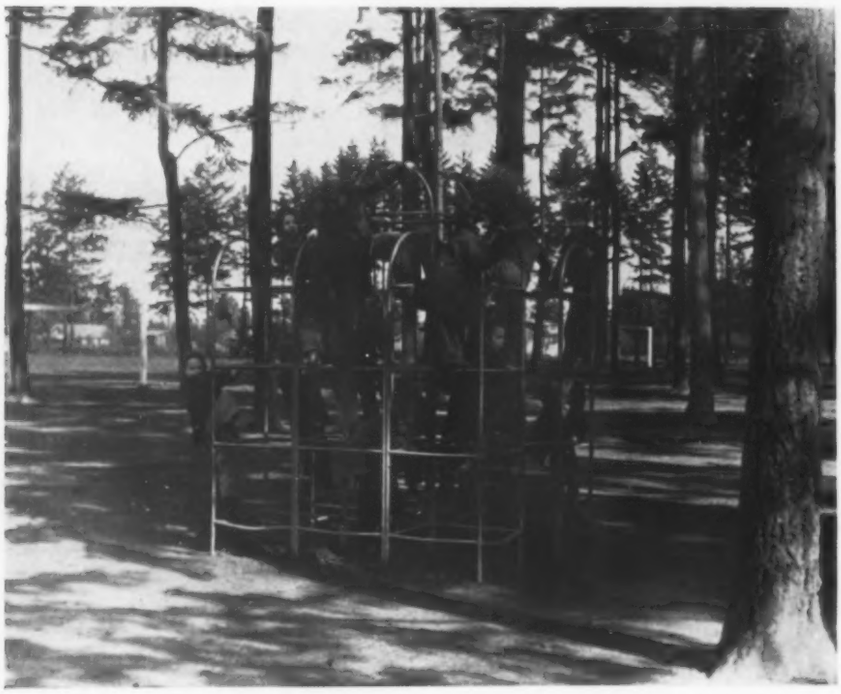
FRIDAY

Salmon patties with egg sauce
Buttered beets Lettuce
Whole wheat toast Milk
Lemon rice pudding

ELDON I. JENNE

Director of Health, Physical Education and Recreation
Portland Public Schools, Portland, Ore.

When It's Time



Left: The climbing apparatus permits young children to climb to their heart's content without getting far off the ground. Right: The sand box is a favorite play area. Opposite Page: The "giant stride" affords plenty of exercise. Photographs from the visual education department of the Portland schools.

PLAY is a natural impulse of the child. It is the center of all child interests and activities to which even eating and sleeping are often subordinate. All normal children like to run, climb, jump, swing and swim. Little children need to pull, push, drag, throw and tumble. They need to make things with their hands, to play with sand and water and to carry out a few simple experiments by themselves and with others. Therefore, when we speak of play as a need of children, we speak about that which is most vital to them if they are to develop as normal, healthy individuals.

Play and recreation are great contributors to personality. The majority of habits and activities that have been found by psychologists to affect personality most profoundly involve the active use of the body and bodily energies. When children learn to play with one another, they learn the essential qualities of living together. They learn that games have rules that they must follow and through their various play activities they learn many of the great lessons of life.

Seventy-five years ago the United States was a nation of small towns and rural communities. Homes were large and surrounded by abundant play fields. There were trees to climb, horses to ride, strawstacks to slide down, planks or rafts to pole about the ponds and the ever-present barn with its challenging play opportunities. Today, social conditions are vastly different. The population is congested in cities. Homes are small and back yards and play space are extremely limited.

While play was at first ignored and then tolerated, it is now rapidly gaining recognition as a valuable educational medium. Today, most boards of education in the United States are providing leadership, facilities and equipment for children's play at schools. They have come to realize that play and the social relationships of children are as much a responsibility of the school as is the study of the three R's and that through the guidance and direction of children's play, in school and out, they contribute to the well-rounded educational growth of children and to the building of a better citizenry.

While play is natural and the desire to play is strong in most children, it must be controlled and supervised so that the rights of all may be safeguarded. As young children by their very nature are inclined to be willful, it is necessary that they be taught to play. Therein arises the need for good leadership, for only through properly supervised play will the ideals of cooperation, loyalty, unselfishness, self-sacrifice, teamwork and sportsmanship be developed.

Realizing the importance of play in the development of our youth, the citizens of District No. 1, Portland, Ore., are vigorously pushing a program to provide adequate play facilities for the children of this rapidly expanding city. Since June 1939, the school district has been engaged in improving the elementary school play fields. The playgrounds of most of the 69 elementary schools have been graded and resurfaced. New outdoor play facilities for basketball, handball, badminton and volleyball have been provided, in addition to multiple-use tennis courts, softball

to Play

backstops, goal posts, sand boxes and jumping pits. Although there is still much work to be done to bring our play fields up to the desired standard, a good start has been made.

In developing that section of these playfields reserved for small children certain essential features were considered.

The area should be located near the building and should be completely fenced. It should provide chair swings attached to a horizontal support that is 6 or 7 feet above the ground; a small slide; a sand box; a play house; a junglegym; low see-saws or teeters; planks for balancing and sliding; saw horses; packing boxes of various sizes, including an old piano box and strong crates; kegs and a barrel with the ends removed; large drag blocks; wagons that children can load, push, pull and ride; a pet cage; a bird feeding station; a wading pool or a shallow pond with an island; or large pans filled with water in which to sail boats and to experiment; a garden spot, and garden tools.

The sand box should be large and should be placed flat upon the ground or, better yet, sunk into the ground. It is convenient to have it located near the wading pool. A wood or concrete shelf a foot or so wide extending around the sand box should be provided so that the youngsters can use it for modeling purposes and for a seat. Beach sand is the best type to use in a sand box. A cover is useful. The box should be placed partly in the shade and partly in the sun.

A convenient storage place should be available for the movable equipment so that it can be stored and locked after school hours or whenever the area is not supervised.

Grass is the best surface for the play area for small children. A dusty surface is unhealthful for children to play on and is strongly objected to by the adjacent property owners. Calcium chloride spread over dusty areas will solve this problem.

The grass needs to be cut frequently. Bunch grass will develop rapidly if it is not cut often and creates a hazard because the children are likely to trip over it.

The best type of fencing seems to be the 2 inch mesh, No. 9 gauge chain link fabric made of copper bearing steel wire, galvanized after weaving. The height of the fence should be 6 or 7 feet.

An adequate number of water connections should be located at strategic points on the play fields for watering shrubs, filling the wading pool, supplying the drinking fountains, flushing court areas and for sprinkling ball diamonds for the older pupils.

All school districts should obtain the services of a competent landscape architect in planning their play fields and school grounds. He should cooperate with the school architect and the director of health, physical education and recreation.

Above: Small pupils of Hogar Infantil No. 9, Mexico City. Below: General plan of the school, reproduced through courtesy of "Architectural Record."

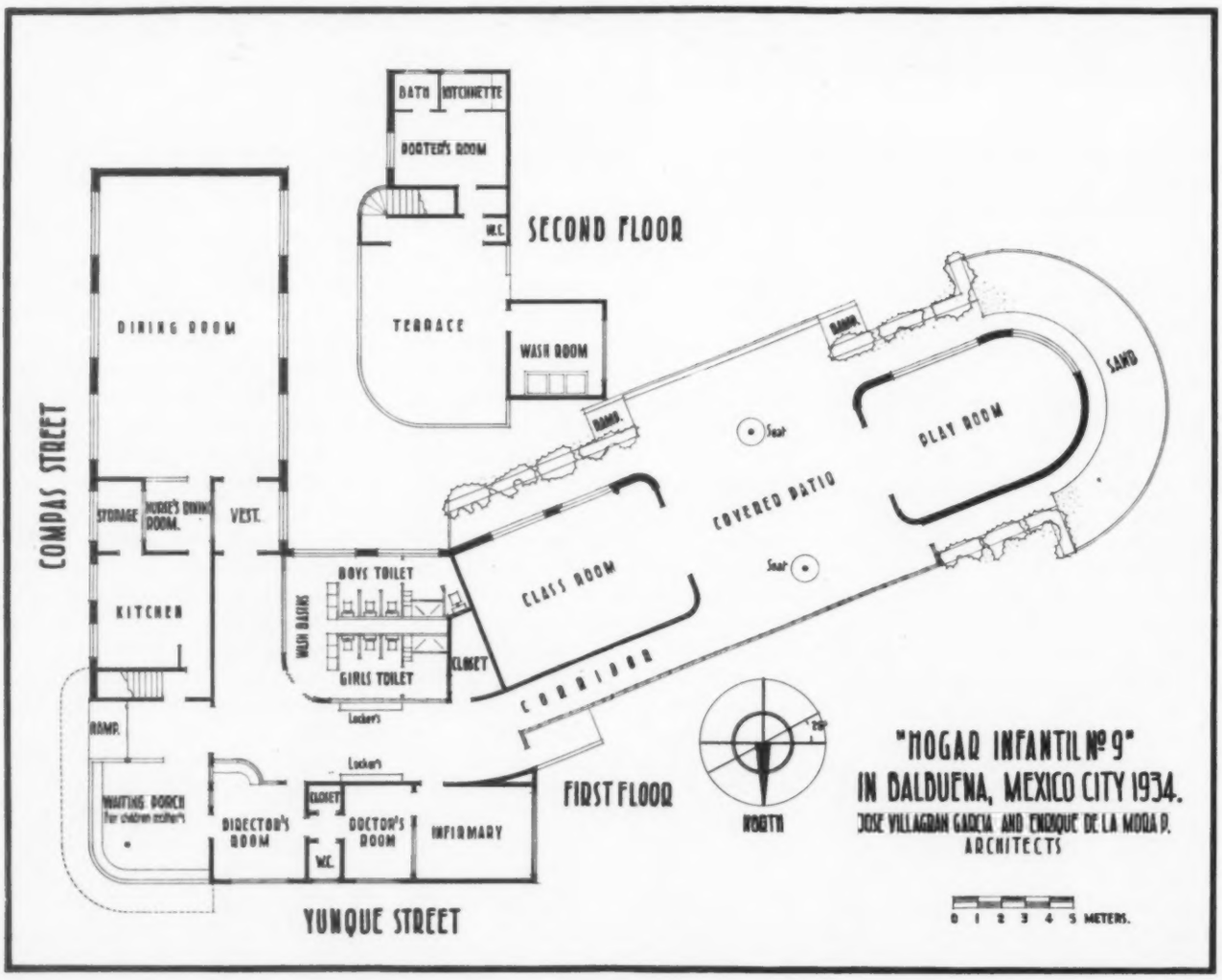
Down

JOSE VILLAGRAN GARCIA

Architect, Mexico City

THE objectives of the nursery schools in Mexico are peculiar to the local setting. They were fundamentally established in order to take care of the child of the working woman in its first four or five years, thus extending the attentions that the federal government provides to children up to 3 years in the dispensaries for infant hygiene.

The home school is, therefore, a concept engendered by the department of public welfare in order to intervene in a direct manner in hygiene of poor children during their first years. The second purpose of the children's nursery is eminently social, *i.e.* to take care of the children while the mother works outside the



Mexico Way

Exterior view of the Home School. Photographs from Mrs. Mary Sklar.

house. The third objective concerns itself with initiating the child in elementary instruction, employing systems similar to, although still far from, those used in the children's schools in the city of Vienna.

In order to construct Home School No. 9 in Balbuena, Mexico City, a terrain was chosen that has as its background a little part of the first nucleus of workers' houses erected by the city in the year 1933. The side upon the park faces to the north and the side street of Yunque faces the east. The entrance to the school was located along the side street in order to assure less movement of vehicles. The northern façade of the school is covered with windows in order to break the cold winds and to enable the pupils to enjoy the agreeable view of the park. This façade is not the main one; nevertheless, it is in front of the park, sacrificing, thus, its sumptuous aspect in favor of the health of the children.

The distribution of each element, as well as the edifice in toto, was made through studying the life of the child, the care that is required on the part of the nurses and the vigilance demanded of the director.

The child is brought by the mother at 7 o'clock in the morning, handed over at the main entrance and, in the corridor, in view of the director, receives a uniform.

Formed in line, the little boys and girls pass to the washrooms where they brush their teeth, breakfast in the dining room installed in the south building and, finally, are led to the class, to the play and music room and to the covered courtyard in which the children remain the greater part of the day. At noon they come back to the washroom and dining room before returning to the courtyard where, extended upon the ground on straw mats, they take a nap. This procedure is to a certain extent primitive but, according to the opinion of a present day hygienist, is the most effective in assuring the correct development of the spine.

During the afternoon the child remains in the nursery school until 6 when he is called for by the mother who awaits on the porch adjoining the entrance of the building. The mothers never enter the interior of the school. For this reason the porch serves as a waiting room and is connected directly with the office of the director. This routine, together with the peculiarities of the lay of the land, caused the unusual form that the edifice presents.

The position of the desk in the office of the director was of the highest importance in planning the home. While she works, she watches by a simple movement of the head the mothers who are waiting, the persons who enter or leave the kitchen and the children.

Little money has been spent in the construction of this children's school ($15,500 in American money) although the materials employed assure its conservation and good condition at small cost. The exterior walls, like the interior, are of common clay bricks made by hand, this being the cheapest material in the city of Mexico. The roofs are of reenforced concrete, leaving the exterior concrete and imitation bricks. The interior floors, like the wainscoting, are of hand-pressed brick. The upper part of the walls and the ceiling are finished with plaster and oil painted.

The architectural solution has fulfilled, in brief, the following needs: (1) function, (2) culture of the people, (3) pecuniary limitation, (4) economic conservation and (5) simple practical construction.

Equipping Today's Kindergarten

LAURA ZIRBES

Professor of Education
Ohio State University

Left: Such equipment as this can help in overcoming fear. Every piece of apparatus should be selected on the basis of the developmental values that it has for the child. Photograph from the Association of Childhood Education, Washington.

TODAY'S kindergarten is a different institution from its historical antecedent. Studies in child development and modern resources combine to indicate the need for provisions and practices that Froebel and Montessori could not have foreseen.

The nursery school has been a fruitful laboratory for a new approach. It is based on a clear recognition of developmental needs of young children. There are implications in such studies for the kindergarten and the primary school as well as for the home and the playground.

Reference to precedent and tradition merely leads to the selection of items suited to activities that have lost their sanction. The letter blocks, the beads, the sewing cards and patterns for paper construction, the colored sticks, the squares and circles, and all the didactic devices of formal learning have now given place to a much more natural functional regime.

A beautiful, unusable tiled fireplace makes a meager contribution to passive enjoyment, whereas apparatus for active, constructive social play is essential.

One inch cubes designed to be manipulated by individuals in response to stereotyped mass instruction perpetuate the inhibition of natural play impulses, favor the restriction of activity to hands and fingers, discourage the cooperative social play through which social attitudes develop and, in so doing, build up needless tensions and strains.

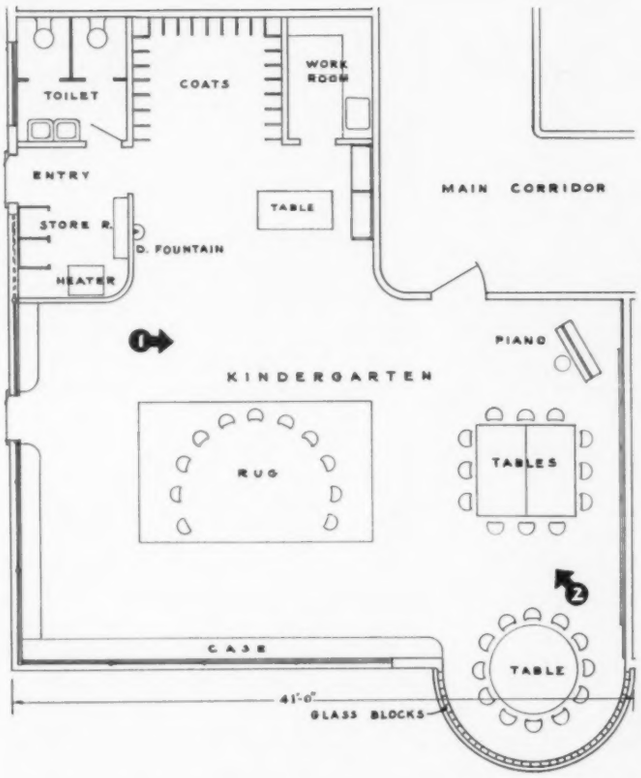
The kindergarten stage of development requires large free movements through which readiness for finer coordination is assured.

Fine muscular adjustments, close work and prolonged periods of close application are bad for the young child's eyes and for his whole nervous system. Furthermore, they misuse time and energy that should be put to developmental uses. They make children dependent on adult direction and verbal command, when they should be learning to get along with other children and to think and respond intelligently to developing situations and social experiences.

Tensions and strains are responsible for discouragement, failure, fatigue, boredom, negative attitudes, subsequent explosive outbursts and unsocial behavior. The modern kindergarten provides suitable rest facilities and avoids activities that involve a piling up of tension and strain.

Repression and inhibition of spontaneous behavior are implicit in a highly organized program of work based on adult direction. Children of kindergarten age can be manipulated by such direction but their development is not furthered by it. Didactic materials and mass instruction alike are survivals from a period in which guidance did not yet know how organic drives and needs were related to spontaneous play impulses of young children.

An attempt to equip a modern kindergarten without reference to



Above: Interior of the kindergarten of Oakdale Union Grammar School, Oakdale, Calif. Left: Plan of the school. Glass blocks are used to provide additional light. Tables and chairs are built to scale for small children. The tables can be pushed together to make larger work space. Frank W. Mayo and Eric Johnson of Oakdale, Calif., are the school architects.

shoes, shoe laces, buttons, buttonholes and zippers, belts and buckles as functional developmental equipment instead of requisitioning items of formal apparatus that were once standard. The money once spent for expensive assortments of colored paper in 4 inch squares, 1 inch circles and narrow strips is more than enough to pay for large sheets of newsprint bought by the ream, several large jars of tempera paints in each of the primary colors, a few good brushes and a big double easel.

This approach must also recognize the necessity for reducing health and safety hazards to a minimum with due reference to deferred as well as to immediate well-being. These matters must come first because they are basic; such other factors as relative cost and durability must and can be subordinated to them without becoming impractical. This concern

this new knowledge is as unwise as an attempt to equip a diet kitchen without special knowledge about foods and nutrition.

Those who have made it their professional business to keep abreast of findings in child development understand how and why the kindergarten utilizes each child's own explains the modern emphasis on suitable outdoor play equipment. It also finds expression in the selection of appropriate blocks.

A functional consideration of the developmental uses of blocks is the point of departure. The blocks must be large enough to keep the child from sitting still in one spot while he uses them but small enough and light enough for him to handle freely, easily, safely and successfully in constructive play. The blocks should favor cooperative social play.

Blocks must do this to enlist spontaneous developmental activity in which larger coordinations can be achieved. Because they must do it with a minimum of hazard to health and safety, splinters must be avoided; too, the surface of the blocks should be impervious to moisture for sanitary reasons. The blocks should be used in a comfortably heated and ventilated sunny room or outdoors. Their edges and planes should be true not only in order that block structures may be stable enough to be safe but also to avoid discouraging results. There should be suitable, convenient storage space in order to contribute to the development of standards of order.

Blocks lend themselves to a wide variety of uses that are not prepatterned or dictated so that the children who use them will conceive of designs and structures in terms of their own play purposes.

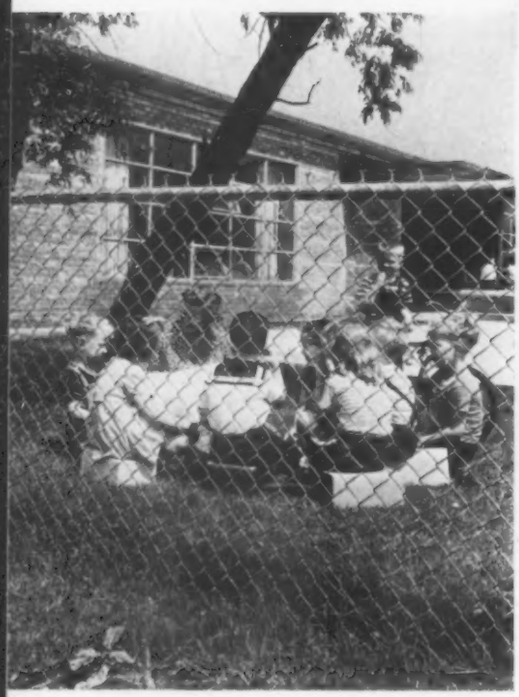
All these purposes can be served equally well with the converted prune boxes of a free kindergarten in an underprivileged neighborhood, by the homemade blocks of a public school that makes its restricted budget go farther by utilizing parent cooperation in its shop or by the purchase of relatively high priced patented blocks from a commercial agency.

What is true of blocks is true of other types of kindergarten equipment. Because the child's need for safety and security must not be sought in ways which make him fear-bound, the junglegym in its various forms has come to be a valuable piece of equipment. It challenges the child to overcome some of his fears and gives him the immediate satisfactions of overcoming fear with a minimal hazard. Its numerous flexible possibilities keep him alert and active and offer a progressive series of new challenges.

Every piece of equipment can and should be rejected or selected and used in terms of the range of developmental values that justify the existence of the kindergarten and validate its budget and its program.

LAWRENCE PERKINS

Perkins, Wheeler and Will
Architects, Chicago



Photographs by Hedrich Blessing, Chicago

Left: The fenced-in play area. Above: The nursery school has a milk bar.

An Architect Went to School

CROW ISLAND SCHOOL, Winnetka, Ill., is designed for children, not merely as a place where children are permitted to learn. With this educational philosophy behind the whole school, the nursery-school and kindergarten are built to please the very youngest generation. The preschool group has its own entrance, play yard, kitchen, workshop, toilets and coatrooms, as well as committee rooms and offices. Isolated and self-sufficient, this unit tends to foster independence and individual responsibility among the children.

To give Winnetka a school building that is both functionally suited to the methods of progressive education and psychologically a stimulus to the children, Eliel Saarinen and his son Eero, famous architectural designers, collaborated with our firm.

The architects worked closely with teachers, school janitors and even the children themselves (under the supervision of Supt. Carleton Washburne and the Winnetka school board), gathering and acting upon the ideas that make this school unusual.

As coordinator of the project, I went to class each day for several months at progressive schools throughout the country. As the result of my observations, the basic Winnetka classroom unit was evolved. Each unit is almost a complete schoolhouse in itself.

A crow's eye view of Crow Island School would look like a giant game of dominoes spread out in a lush green setting. The basic plan of the building is nothing more than the grouping of these isolated unit classrooms in three wings—intermediate, primary and preschool—about a central assembly room, office and gymnasium building. This basic classroom unit has been varied only in the preschool wing, an isometric drawing of which serves as the cover design of this portfolio.

An "all weather" play area in a completely fenced play yard is a feature of the nursery school. Apparatus is placed on a safe, nonskid mixture of asphalt and tanbark. The school's play areas were planned by John McFadzean, assistant superintendent of schools in Glencoe, Ill., and Robert Everly, Glencoe's superintendent of parks. These men have specialized in developing comprehensive plans for the coordination of education and recreation in "park-schools."

A copper screened observation gallery is included in the nursery school, so that practice teachers or parents may watch the youngsters unobserved. Throughout, the design emphasizes low ceilings, wide expanses of windows and walls of vertical Ponderosa pine planks. These innovations lend a homelike touch.

Brilliant primary colors completely remove an austere look from the school. Everything is decked out in color—draperies, doorways, shelves and cabinets. Under the window seats are spacious shelves and large rollaway boxes for blocks and toys, instilling in the child, from the first days of school, a sense of neatness.

Because nursery school children do not go home to lunch, they have their own kitchenette and milk bar, where they may procure their food.

Both kindergarten and nursery schoolrooms have alcoves that also serve as committee rooms for early democratic meetings, as isolation rooms for individual consultation and as workshops.

A sense of individuality and of ownership is established early. Each child has his own coatroom peg, which may be identified by a bird or animal decalcomania.

They Will Be Ready in 1946

Training the Noncollege Graduate

GLAYDON D. ROBBINS
Principal, Stillwater Junior High School, Stillwater, Minn.

A GROUP of graduating seniors of a city high school was engaged in an informal discussion with the guidance counselor. The counselor had just stated that lack of vocational training was a contributing cause leading to unemployment. A boy spoke up:

"Well, isn't that a serious indictment of the public schools and of high schools, in particular? We, as graduates, have a good foundation in how to read, write and speak our language; we know how to subtract, add, multiply and divide, as well as work a few fractions and percentages; we know a few basic facts regarding our government and other democratic institutions; we have learned something about the natural laws governing our physical environment, but we haven't been trained in the ability to go out into the world and *do* anything."

College Education "Necessary"

Another pupil followed: "I agree. It is necessary to go to college if you want to get a job and fewer of us every year are able to go to college."

Another said: "Sure, we go out of here and apply for a job and they say we have to have a college education even to be considered."

Another: "We've wasted our time in high school because we haven't learned how to do anything for which the world will pay us a living."

The implications and assumptions in such statements are serious and of far-reaching significance to educators because of their prevalence and because of the incomplete reasoning that prompts them.

The expressions of such opinions come from the pupils who are not planning to go to college. The reason that the prospective college student does not express similar ideas is because he recognizes that the completion of his educational career lies at least four years in the future and that his impending advent into the economic world is to take place not in 1942, but in 1946. In other words, he recognizes that he has not reached the end of his trail of education and preparation for his career when he is graduated from high school; he sees four long years of additional training necessary before he will be ready to seek an economic niche of his own.

The mental attitude of the noncollege preparatory pupil, however, runs in different channels. Recognizing the fact that, because of lack of funds or lack of ability or both, it will be impossible for him to go to college, he has adopted the attitude that upon graduation from high school he has completed his education and must, therefore, step out into the economic world prepared to earn a living for himself. Whereupon he examines his qualifications, finds them inadequate and proceeds to indict the secondary school system that turned him out capable of very little, economically speaking.

Many educators have followed a similar line of reasoning to this incomplete conclusion and, without further consideration, have advocated that the responsibility of secondary education should become one of vocational preparation rather than one of creating a foundation in the academic tools necessary for development and growth of the individual economically, socially and personally. Such a conclusion is unwarranted in light of the actual facts.

Secondary schools have never claimed that their function was to turn out a vocationally trained product able to take his place in the economic world any more than they have claimed to turn out an academically trained product of ability equal to a college graduate. But for an educator or layman to say that the high school should turn out a vocationally trained product in a four year period is equivalent to saying that the high school should also turn out an academically trained product equal in ability to a college student, because, in reality, both types of training require from two to four years beyond high school.

The basic fallacy in this reasoning is the failure to attach significance to the four years of additional training that are required of the college student. If the noncollege student were to have the same attitude that the college student is forced to accept in regard to the relationship between his training or educational period and his ultimate economic success, he would recognize that his graduation from a secondary school merely meant that the foundation had been laid upon which he must build a superstructure of skill and ability for which eventually the world would be willing to pay a price. He must reconcile himself to the fact that he, too, belongs to the class of 1946, not 1942, and that the next four years is the crucial period of training because it is in these years that he must learn how to do something well. Such a reconcilement must inevitably involve recognition of the fact that these next years may be economically unprofitable.

Learning Process Must Go On

By means of elaborate and spectacular commencement exercises, we, as educators, have been more or less guilty of encouraging and fostering the impression that completion of twelve years of schooling marks the end of a child's learning. The college preparatory student is forced to realize that his learning process must continue, but we have failed to point out to the noncollege student that his learning process must also continue. As a result, he has been led to believe that he is ready to take a place in the economic world upon graduation from high school.

The solution to the problem, it would seem, is twofold. First, edu-

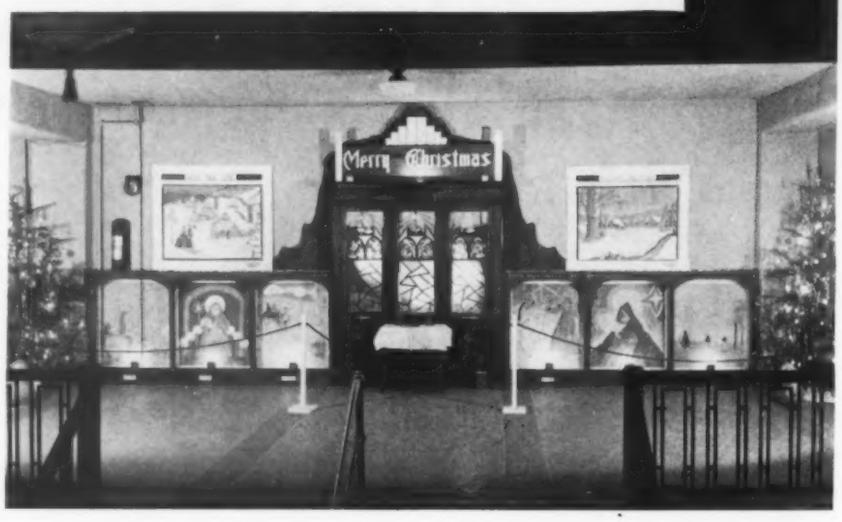
cators must not confuse the responsibility of the secondary school either in their own minds or in the minds of their pupils. Secondary education must confine itself to the presentation of the basic tools of learning, to the development of skill in the use of these tools and to the training of the personality of the youth in the course of these developing processes.

Second, upon this foundation of knowledge and personality, college and noncollege students alike must be convinced that it is their responsibility to build a superstructure of specialized skills and ability in the period subsequent to high school graduation which, at the end of that time, will permit them to earn a living.

The question will naturally arise as to how noncollege students will be able to rear this superstructure of specialized skill and ability. The answer lies in a number of mental attitudes, such as the following:

1. An unswerving determination to make the next four years a training period for the development of learning in their lives and not the beginning of an economic blind alley.
2. An acceptance of the fact that little or no income during this period is more than compensated for if the activity involved leads toward the desired goal.
3. A willingness to accept opportunities for training and the development of skills even though the line of occupation involved may not be highly remunerative.
4. Acceptance of the fact that white collar jobs are not always the most desirable and that there is nothing dishonorable about a pair of overalls, a lunch bucket and a few calluses on the hands if they will provide an avenue to economic security in the future.
5. A firm conviction that as prospective members of the noncollege class of 1946 the highest rewards will go to the best prepared and best trained members.
6. The strength of purpose that makes it possible to refuse the monetary temptation of an opening with no educational value in favor of the economic loss that may accompany an opportunity that offers the desired training and development.
7. Willingness to work hard and to sacrifice much in the present as a means of attaining the goal.

Christmas Comes to School



G. G. STARR
Superintendent of Schools, Arcanum, Ohio

A CENTRAL decorative scheme for Christmas has proved to be a worth-while project at the Arcanum School, Arcanum, Ohio, for several years. The spacious entrance and wide main hall of the building provide an excellent place to present an elaborate display.

Instead of smaller decorations in the various rooms, this large project, which is a cooperative enterprise of the entire school, has become an annual undertaking. Each year an attempt is made to vary the decorations.

When the committee met to plan the decorations for 1940, the aim of the group was to select a new and different motif. The central part of the display portrayed the religious atmosphere of Christmas with cathedral windows and religious drawings on either side and with a table in front on which were placed candles and the Bible. The secular spirit of Christmas was obtained by means of decorated trees, winter scenes and a large sign, "Merry Christmas." Behind organ pipes that were located on top of the trophy case was placed the loud-speaker of the school's amplifier through which was played both religious and secular music.

The background, frames and outlines were constructed of green and white corrugated paper, which is adaptable to cutting and manipulating and which has a pleasing appearance.

The glass of the trophy case was made to represent cathedral windows by means of translucent colored paper that was cut and pasted on the back of the glass. Lights placed behind the windows produced a realistic effect.

All grades in the local school, from the first to the twelfth, had a part. Each of the first six grades prepared one of the religious pictures, which were done in pastel tints with colored crayons.

The two winter scenes were painted by pupils of the seventh and eighth grades. The lettering above all pictures was prepared by members of the high school commercial department. Other high school pupils decorated the trees, cut out frames for the pictures and constructed the pipes for the organ.

The decorations were begun about one month before the Christmas holidays and were put in place a week before school closed for the vacation. During this period not only pupils but many of the adults of the community viewed the decorations, for during this week several school activities, such as Christmas programs and a P.-T.A. meeting, were held.

Many benefits can be listed for the expenditure of the time and effort necessary for the completion of such a project, including motivation in art classes, training in a cooperative activity and the development of cheerful Christmas spirit.

Improving Pupils' Speech

A Practical Program of Correction

C. ESCO OBERMANN
University of Iowa, Iowa City

NUMEROUS surveys of speech defects in school populations have revealed that about 10 per cent of the pupils have some type of speech defect. Of the 10 per cent who are found to have some handicap, about 90 per cent have an articulatory fault. The other 10 per cent includes stutterers and various unusual types, such as aphasia.

In spite of the intricacies of the speech action most people learn to speak one or more languages adequately. Just what language will be spoken and just how it will be spoken are determined by the type of stimulation the individual receives during his speech developmental years. If a young child grows up in a home in which there is a foreign accent and if he is not exposed to a more adequate type of English speech, he will speak with the accent that he has heard. If a child never hears any speech at all he will develop no speech; an example is the muteness of the congenitally deaf.

Teachers and speech correctionists should exercise good judgment in deciding when a child's speech should be retrained. There is no *one* English speech. The speech defect should be an actual or potential handicap to the individual before remedial procedures are applied.

Lack of Auditory Discrimination

In speech we tend to reproduce what we hear but it must be remembered that the objective stimulus alone does not completely mold the behavior of the organism. Often, a child grows up with defective speech sounds and apparently does not hear the difference between his speech and the speech of those about him. In other words, the objective stimuli have played upon an organism that is apparently inactive or is incapable of making finer auditory discriminations. It should be pointed out that these children may not necessarily have a hearing defect. They simply do not distinguish between some of the more subtle variations.

Sometimes structural and physiological defects in the speech mechanism account for the faulty speech. Spasticity or the paralysis of certain important muscles may affect the speech. It may also be affected by faulty dental structures or abnormal structures of the tongue, throat, palate and jaws. In this discussion, however, we are primarily concerned with those articulatory defects of speech that cannot be attributed to any anatomical or physiological abnormalities and are, therefore, said to be "functional" in type.

These functional speech defects may take the form of omitting certain sounds, slighting sounds, substituting one sound for another, voicing sounds that should be unvoiced or vice versa, or distorting certain sounds.

Locating Incorrect Sounds

In undertaking to correct the faulty speech characteristics of a pupil, it is important that the exact sounds involved should first be located. These are generally consistent and are usually surprisingly few in number even though the spontaneous speech seems to be deficient. Sometimes, however, a youngster's speech may be said to be "generally inaccurate," which means that his speech errors are not consistent. After the specific errors have been revealed, the instructor should then proceed to supply the pupil with concentrated stimulation on those sounds that he does not produce accurately.

Usually, the best procedure will be found to be that of working on one faulty sound at a time until that sound is cleared up; then the work may proceed to the next faulty sound. However, the speech correctionist will find it necessary to give some attention to motivation and to making the work interesting; it may become necessary to introduce work on various sounds in order to provide variety and work interest.

There is little point in asking a pupil to correct a faulty speech habit if he cannot hear or has not heard the difference between his production and the correct production. Therefore, a fundamental aspect of speech correction is that there shall be a far greater number of stimulations than the responses requested from the pupil.

Position Is Not Important

Ordinarily, it is not helpful to suggest that pupils attempt to place their speech structures in what seems to be the correct position to produce the sound. It must be remembered that speech is a dynamic moving process and is so complicated that it cannot be controlled on a conscious level. It should be remembered, too, that many people speak quite adequately and yet, if careful moving pictures were taken of the placement and movement of their speech structures, it would be found that each varied considerably from the other. Moreover, the person who has learned to speak correctly knows little about the physical movements involved in making the sounds; such knowledge is not essential to the learning of good speech.

Another point that should be made is that speech structures that obviously depart widely from the normal are often found in people whose speech is completely adequate. Considering the ability of the organism to adjust its behavior to the structures with which it is equipped, it will be found that few speech defects can be attributed to faulty anatomy.

Teachers and speech correctionists should be careful to avoid labeling the child in such a way that he will develop feelings of inadequacy or inferiority because of his defective

Sixty-Nine Sounds of English Speech With Words Illustrating Their Proper Production in Various Positions

Sound	*Initial Position*	*Medial Position*	*Final Position*	*Sound*	*Initial Position*	*Medial Position*	*Final Position*
a	*a*pple	c*a*ndy	ba*a* ba*a*	t	*t*wo	four*t*een	eigh*t*
a	*a*re	d*a*rk	l*a*	th	*th*irsty	ari*th*metic	mou*th*
a	*a*lone	b*a*lloon	sod*a*	th	*th*at	ei*th*er	smoo*th*
ai	*ai*m	c*a*me	M*ay*	v	*v*ice	vel*v*et	glo*v*e
aw	*aw*ful	f*a*ll	s*aw*	w	*w*e	*w*ay	ble*w*
e	*e*nd	t*e*nt		wh	*wh*y	a*wh*ile	
ee	*ee*ven	s*ee*ds	m*e*	z	*z*ebra	bu*s*y	bu*zz*
i	*I*	f*i*ve	cr*y*	bl	*bl*ack	bum*bl*ebees	ta*bl*e
i	*i*t	v*i*sit		br	*br*ing	um*br*ella	tim*b*er
o	*o*pen	r*o*de	sn*ow*	dl		wad*dl*ed	mid*dl*e
o	*o*r	c*o*rn		dr	*dr*ain	a*dd*ress	lea*d*er
oo	*oo*ze	m*oo*n	t*oo*	fl	*fl*ower	butter*fl*y	care*fl*
oo		f*oo*t		fr	*fr*ee	a*fr*aid	blu*ff*er
ou	*ou*t	m*ou*th	h*ow*	gl	*gl*ad	stra*gg*ling	ea*gl*e
oa	*oa*ts	m*oa*n	t*oe*	gr	*gr*ass	ea*g*erly	ti*g*er
oi	*oi*l	b*oy*s	t*oy*	kl	*cl*ass	ci*rcl*ing	un*cl*e
u	*u*p	c*u*t	mamm*a*	kr	*cr*acker	ice *cr*eam	ba*k*er
ju	*you*r	p*u*re	n*ew*	pl	*pl*ease	air*pl*ane	stee*pl*e
b	*b*ell	ra*bb*it	tu*b*	pr	*pr*int	a*pr*on	pa*p*er
ch	*ch*eese	tea*ch*er	chur*ch*	shr	*shr*ink	fi*shr*erman	wa*shr*er
d	*d*uck	mi*dd*le	ba*d*	sk	*sk*ate	Ala*sk*a	tu*sk*
dg	*j*ump	en*g*ine	bri*dg*e	skr	*scr*atch	uns*cr*ew	whi*sk*er
f	*f*un	lau*gh*ing	pu*ff*	skw	*squ*are	Es*qu*ire	
g	*g*un	a*g*ain	do*g*	sl	*sl*ide	a*sl*eep	ca*sl*e
h	*h*ow	un*h*appy		sm	*sm*ile	di*sm*iss	quarrel*som*e
j	*y*ellow	on*i*ons		sn	*sn*ore	uns*n*ap	fa*sn*en
k	*c*ome	p*c*nic	clo*ck*	sp	*sp*ider	su*sp*ect	wa*sp*
l	*l*ilac	li*l*y	we*ll*	spl	*spl*endid	di*spl*ay	–
m	*m*ine	s*m*ile	ho*m*e	spr	*spr*ead	bed*spr*ing	whi*sp*er
n	*n*est	c*n*dy	he*n*	st	*st*op	la*st*ing	fa*st*
p	*p*encil	pa*p*er	cu*p*	str	*str*eet	ma*str*s	Ea*st*er
r	*r*un	a*fr*aid	fo*r*	sw	*sw*allow	uns*w*eetened	
s	*s*un	si*s*ter	ice	tr	*tr*y	elec*tr*ic	mo*t*or
sh	*sh*irt	wa*sh*ing	fi*sh*	tw	*tw*ist	un*tw*ist	
zh		mea*s*ure	gara*g*e				

speech. The emphasis should be on "speech improvement," which may well include all the pupils in the school, rather than on "speech correction," which tends to isolate those few who are receiving correction. Every effort should be made to avoid making the child feel that "something is wrong with him."

In making examinations preparatory to offering constructive speech training, the pupils should be required to produce all of the sounds of English, preferably in spontaneous speech. Often, it is not possible for the examiner to get a representation of all the English sounds in their various positions by listening to the spontaneous speech of a pupil. At least, this cannot be done in a short period of time. Therefore, it is advisable to set up sentences to be read that contain the words that carry the sounds to be observed.

When the pupil is asked to read these sentences he should not be aware that he is taking a speech test. If he is made conscious of his speech during his examination he is likely to distort his speech, through special effort, to such a degree that his normal performance will not be observed.

The various sounds of English should probably be tested in all positions in which they can occur in words, *i.e.* initial, medial and final. There is considerable argument for testing sounds only in the medial position since all sounds are medial in connected speech; that is, the final sound of one word cannot be regarded as being final if that word is followed by another one. In speech we tend to relate the various words produced about as closely as we relate the syllables within a given word. However, it is sometimes observed that a pupil produces certain sounds accurately when they occur in one position in a word but inaccurately in another position.

The accompanying list of words contains the sounds of English in various positions. These words or words similar to them should be worked into sentences and these sentences should be read by the pupil. Pupils who cannot read should be presented with pictures that will elicit the words containing the sounds to be observed. Usually, these pictures will be presented to the pupil and he will be asked certain leading questions that will bring out the words desired. The examiner will not supply the words for the pupil since repetition after the examiner would amount to mere imitation and would give no adequate presentation of the pupil's usual speech. The sounds include vowels, diphthongs, consonants and certain blends. The examiner should be careful to distinguish between mere mispronunciation and true defects in articulation. Usually, the pupil should be tested on several different words con-

taining the sound that is suspected of being faulty.

It will be noted that in some instances words have not been supplied to illustrate the sound in certain positions. This might be because the sound never occurs in that missing position in English speech or, perhaps, it occurs in words that are so rare that little weight need be given to them even though they might be inadequately produced by the pupil.

Eliminating Functional Defects

It is usually advisable to make a physical check-up of the pupil before the assumption is definitely made that the speech defect is entirely functional. The mouth and throat should be examined for both structural and manipulatory deficiencies of the throat, uvula, palate, tongue, lips and jaws. The occlusion of the teeth should also be checked. When it is believed that there are abnormalities, the pupil should be referred to a physician for further examination and recommendation.

When the sounds that are incorrectly produced by the pupil have been isolated and recognized it is then possible to set up a program of speech improvement or correction. The speech error that should be attacked first is the one that is making the greatest difference in the pupil's speech, that is, the error that is most outstanding to the listener. If possible, this should also be an error that will yield readily to a systematic program of improvement.

The purpose of selecting the speech error or sound with these particular characteristics is that rapid improvement may be expected from working on that one sound and this, in itself, will provide motivation and encouragement for pupil and teacher to continue the work laid out.

When it is certain that the pupil can hear the difference between the two sounds he will often correct his own speech without further work. It will usually be necessary, however, to have him cooperate in well-planned drill exercises before the speech fault will be eliminated. The correction of his speech error will not come about by asking him to attempt a production of the sound time after time. The stimulation method should be used. That is, the teacher should use the correct sound in a syllable or word and present it to the pupil five times and then ask him to repeat it just once.

For example, the teacher may repeat: "say, say, say, say say," while the child listens closely. Then the child should be asked to imitate that word by attempting "say" just once. If he succeeds in giving it correctly the first time he may be tried on other combinations with "s." He should be encouraged and commended on his improved performance. Sentences involving a large number of words containing the initial "s" sound may be set up for reading. In order to keep the pupil motivated, games may be set up, such as the following:

The pupil is asked to find a number of small pictures of objects that are labeled with words involving the initial "s." These can be placed on cards and the words printed in large letters just below the pictures. If the child is able to read, only the words need be printed on the cards. A game is played with these cards and the score of the game is kept from day to day. Scoring is done as follows: the child looks at the picture or word and pronounces the word. If the sound is correctly made the teacher puts the card in a stack on his right. If the sound is incorrectly made, the card is put in a stack on the pupil's left. His score is the number of correct sounds produced. A chart is set up to show his day-to-day progress.

Competition Is Undesirable

Teachers will use their own ingenuity in setting up various types of games or scoring methods. The games should be such that the improvement in articulation always outranks the mere playing of the game for the sake of the play itself. Inter-pupil competition should be kept to a minimum. The pupil should be led to compete only against his own performance. A brief list of such exercises is presented here.

1. Set up a notebook or workbook to which the pupil adds the various exercises formulated and used for his speech improvement.

2. A number of words containing the faulty sound or sounds are presented as rungs on a drawing of a ladder. Correct articulation of the words advances the pupil up the ladder; failure on a word requires that he begin again at the bottom.

3. Pupils collect poems or short stories that contain the sounds that they are unable to articulate correctly.

4. Pupils write original sentences, poems or stories containing the sounds that they do not articulate correctly.

5. Pupils plan imaginary trips to places with names containing their faulty speech sounds.

6. Pupils make sets of cards on which are words involving the sounds they usually confuse. They sort these cards into stacks, one stack for each sound, and are scored by the number correctly placed.

When it appears that the pupil has mastered the production of a given sound the next faulty speech sound is attacked in a similar manner. As far as possible the pupils themselves set up the program for their own speech improvement. Let them direct their own games and exercises as far as possible. Pupils with similar faulty speech work well together if in small groups.

Teacher Should Set Example

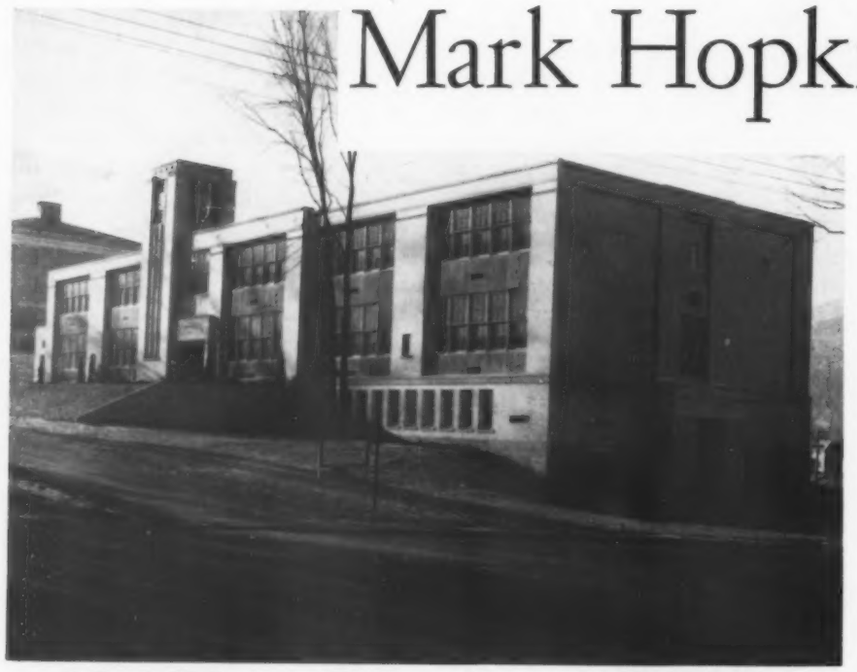
Twenty minutes of systematic stimulation each day should be devoted to speech correction work on articulatory defects. Aside from this regular period, the teacher will not do more than use adequate speech herself to continue the pupil's speech training. If it is found that the child's faulty speech habit recurs in geography class, for instance, it is not advised that time be taken to correct the faulty sound at that time. Let the correction work be contained in a definite period. It is always helpful, of course, for pupils to listen for good speech production. Teachers should, therefore, be extremely careful of their own speech and should see that the child has an opportunity to hear the sounds being properly made.

It should be emphasized that the success of a speech improvement or speech correction program will depend largely on the ingenuity of the teacher in setting up devices that will motivate the pupils toward better speech. In this brief outline only a limited number of suggestions can be given. It is hoped, however, that the general point of view has been successfully presented and that the teacher will be able to carry on with her own procedures.

Mark Hopkins School,

JUSTIN BARRETT
Superintendent of Schools,
North Adams, Mass.

MORRIS W. MALONEY
Architect, Springfield, Mass.



CONSTRUCTION DETAILS

CONSTRUCTION: Foundations and basement, reenforced concrete. Superstructure, solid brick walls faced with manganese face brick, furred for plaster. Interior superstructure, structural steel frame with bar joist floors and roof; corridors, two-way reenforced concrete "grid" system. Roof, 3 inch gypsum plank with 1 inch insulation and tar and gravel membrane. Exterior trim, Indiana limestone. Interior trim, red Appalachian oak, enameled steel combination bricks, extruded polished aluminum. Windows in corridors and stairwells, glass brick; others, balanced pivot type.

FLOORS: Gymnasium, wood block. Classrooms, maple over screeds and sound deadening. Kindergarten, rubber tile. Corridors and toilets, ceramic tile.

WALLS: Classrooms, corridors, toilets, linoleum to height of 7 feet 3 inches. Bright colors throughout.

CEILINGS: Gymnasium and corridors, accustical treatment.

HEATING: Twin tubular boilers, power oil burners. Low pressure vacuum vapor steam system with duplex return pumps.

VENTILATING: Unit ventilation throughout, with dual thermostatic control on all units and ventilation. Exhaust air removed by central fan in tower.

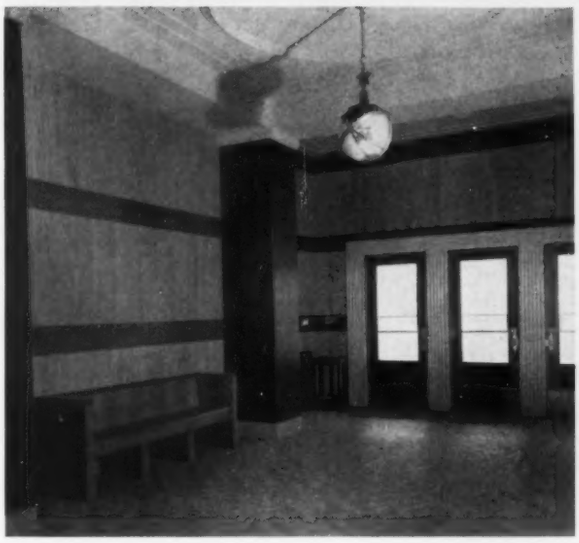
LIGHTING: Classrooms and corridor, semi-indirect. Gymnasium, direct, with flush lens plate.

ELECTRICAL: Master clock and program device. Intercommunicating telephone system. Two channel radio system with amplifiers in every room. Motion picture projector for sound or silent films.

COSTS: Construction, including landscaping and grading, $173,648; equipment, $19,120; architect's fee, $12,350; site, $8500. Total, $213,618.

Top: Exterior view of the Mark Hopkins School, opened January 1940. The building contains 17 classrooms, combined gymnasium and auditorium, a supply room, a demonstration room, two restrooms for teachers, an office for the school doctor and the principal's office. It is fireproof throughout. Center: The kindergarten is decorated in soft colors and the floor is covered with linoleum. Right: The school library is well appointed. The floor is carpeted and the book cases and furniture are especially designed for library purposes. A student teacher is in charge of the library.

North Adams, Mass.



Top: One of the built-in, illuminated corridor cases for the display of trophies and art work. Classrooms are also equipped with adequate space for displaying the pupils' work. Center, left: Entrance lobby. The lighting fixture is a globe of the world. Center, right: Windows in the corridors and stairwells are constructed of glass block. All lockers on the second floor are located in the corridors and are recessed flush with the wall. The building is designed so that there are no radiators, lockers or display cabinets for children to stumble over. Right: The science room is equipped with an especially built demonstration desk that includes gas and water facilities. Furniture in all classrooms, is movable. Each room contains a loud-speaker.

Winding Up New Laws of 1941

M. M. CHAMBERS
Specialist in School Law

THERE is still much to report about new school statutes in this active legislative year.

Michigan empowered the state board of education to investigate and review any decision of any local board of education regarding transportation routes, walking distances for pupils or the suitability and number of vehicles used for transportation, and to confirm, amend or set aside the decision.

Attacking the problem of a patchwork of more than 11,000 school districts, thousands of which are too small to support or administer a modern school, Illinois authorized county superintendents of schools to call conventions of school board members to determine whether or not to have a county school survey. In case of an affirmative decision, a committee of five members will be selected to map a proposed district reorganization of the county after conferences and public hearings. From each such committee, a preliminary report is due prior to Dec. 31, 1942, and a final report by March 31, 1943. The state appropriated $25,000 for the expenses of these committees, the maximum amount for any one county to be $750.

Tax Districts to Be Reorganized

A new Florida statute stipulates that wherever there is a special tax school district that does not contain a high school having at least 100 pupils in grades 10, 11 and 12, the county superintendent must prepare a tentative plan for the reorganization of the school districts in the county. This plan goes first to the state superintendent of public instruction and then to the county board of public instruction; after approval it must be placed on the ballot at the next biennial general election. A majority vote in the entire territory involved in each proposed new district determines the result. The act affects nearly every county in the state. The first elections under it were held in November.

In Kansas, the legislative council, which functions as a sort of continuing research agency for the legislature, was directed to study the doings of the state high school activities association to determine whether its work should be placed under the supervision of some state agency. Another act also directed the legislative council and its assisting agencies to continue research on school laws and drafting of school legislation.

Illinois created a state public school commission of nine members, to be appointed by the governor, to codify all laws pertaining to public education. The commission is empowered to employ assistants and an appropriation of $12,500 was made.

Wisconsin's annual state aid appropriations aggregate $8,149,500, of which $5,200,000 per year is for elementary schools; $1,385,000 is for high schools; $305,000 is for transportation and tuition, and the remainder is for various special purposes, including $285,000 for county normal schools and $255,000 for vocational and adult education.

Illinois appropriated to the state common school fund $15,068,000 for the first fiscal year of the biennium and $16,312,000 for the following year. The legislature also reappropriated old property tax delinquencies amounting to nearly $5,000,000. A companion act raised the amount of the state payment per elementary pupil from $51 to $56 per year.

Michigan appropriated $44,500,000 per year as primary state aid to local public schools and enacted a new system of distribution under which districts having 3000 or more pupils will be allotted $57 per year for each elementary pupil and $77 for each resident high school pupil. In smaller districts the allotment for high school pupils varies from $60 to $77, increasing with the number of pupils. The allotment for elementary pupils also varies according to a formula that takes into account both the number of teachers and the number of pupils.

The state will pay the tuition of high school pupils attending high schools in districts other than those of their residence, but not to exceed $100 per year per pupil. The exact amount is to be computed on the basis of the per capita operating cost of the school attended.

Another forward-looking finance measure in Michigan is a new statute that empowers any local board of education, with the consent of a majority of the electors of the district, to set up a fund in anticipation of future needs for the purchase of sites or for the construction and repair of school buildings. School districts are authorized, within the 15 mill limitation, to levy not to exceed 5 mills for a period of not more than five years for the purpose of feeding this fund.

Kansas to Issue Bonds

Kansas provided for the refunding of school bonds bearing interest at a rate greater than 4 per cent. Another act authorized the issuance of bonds for the purchase of equipment and repairs for school buildings after approval of the proposition by the voters. Heretofore, bonds could not be issued for these purposes.

Florida revised the tax laws to provide for the assessment of all property at its actual value. Previously, the property tax base ranged from as low as 8 per cent to as high as 60 per cent with the average being about 24 per cent of actual value. The change was needed to prevent local tax resources for schools from becoming inconsequential.

As a step forward in state aid, Florida provided for the employment of county supervisors of elementary schools at a ratio of one supervisor to approximately 100 teachers. The state will pay the salary of such a supervisor, in the form of an additional "instruction unit" of state aid, if the county school authorities employ as supervisors persons meeting qualifications prescribed by the state board of education.

County boards of public instruction, school districts and vocational agriculture departments in Florida

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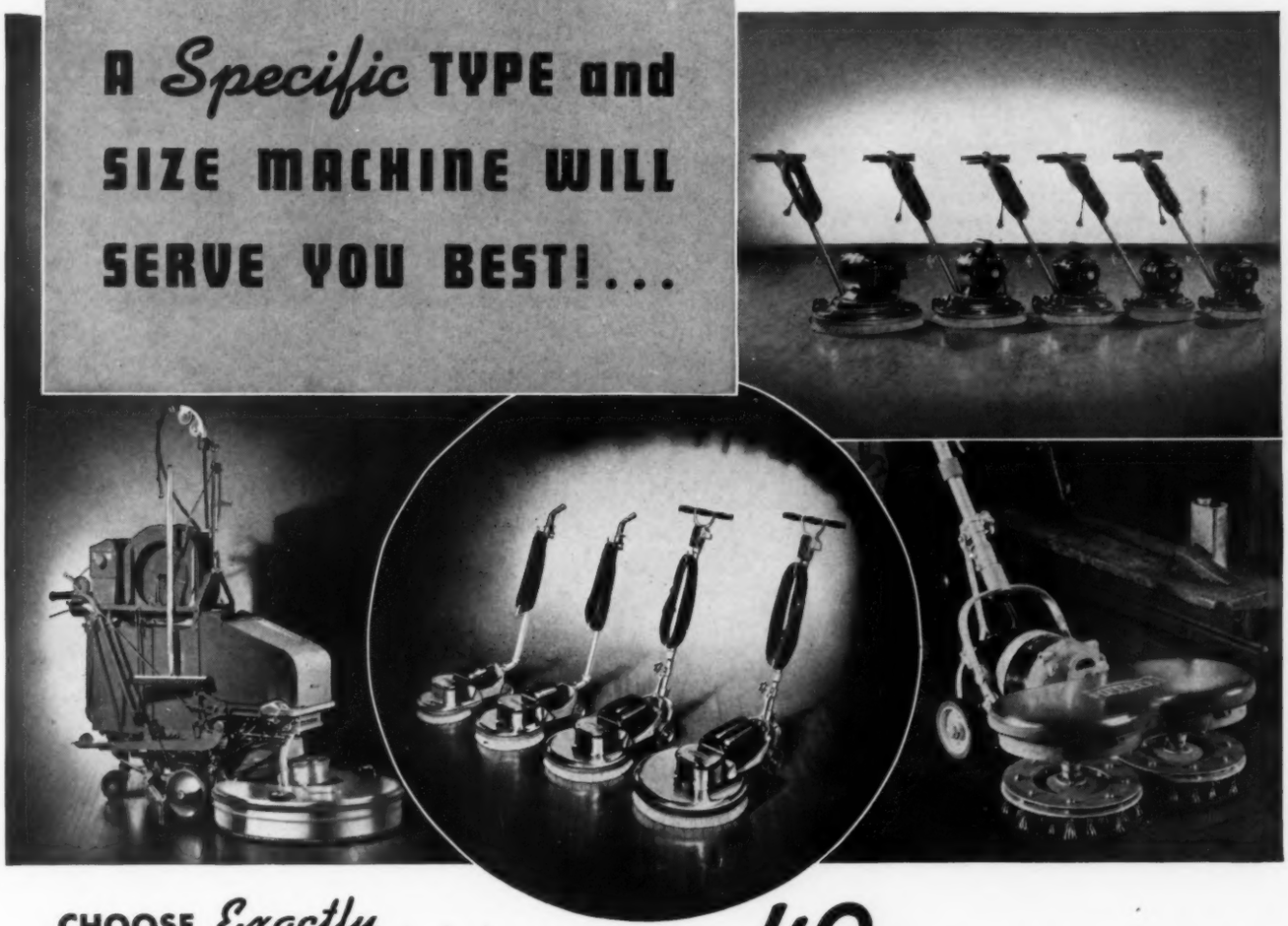

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are newly authorized to acquire land for forest purposes. This state also empowered the state board of education to accept gifts and bequests to educational funds, provided there are no conditions attached to the gift that would be contrary to the laws relating to the custody and expenditure of the fund.

Illinois enacted a continuing contract law for teachers, requiring notification before April 25 of each year to teachers regarding their reemployment and requiring written reasons to be stated whenever the decision is negative.

The new statute also imports some of the characteristics of a genuine tenure law. This is markedly true of the section that applies to school districts governed by boards of education as distinguished from districts governed by boards of school directors. Precise figures are not available, but, presumably, the latter type of district includes the majority of the more than 11,000 districts in the state, while the former embraces the city districts and some of the larger urban-rural districts. Neither part of the new law applies to districts having a population of 500,000 or more. Therefore, Chicago is excluded.

In districts governed by boards of education, after a probationary period of at least two successive years, one of which must be subsequent to the effective date of the act, a teacher who is reemployed will enter upon "contractual continued service," to continue until the teacher reaches the age of 65, after which any further employment will be on an annual basis. An exception permits the board of education to extend the probationary period to three years by adding one more probationary year in cases in which it deems this desirable.

After attaining the "continuing" status, a teacher can be dismissed only upon notice at least 60 days before the end of a school term, and after a hearing before the board on written charges if requested by the teacher. The same provisions apply to reductions in salaries. Provision is made for appeal to a county appeal committee appointed by the county superintendent of schools. An exception permits the honorable dismissal of teachers without a hearing in cases in which a reduction in the teaching staff is necessitated by a substantial decrease in the number of pupils, but in such cases any teacher so dismissed is entitled to reinstatement if the position he held is recreated within a period of one year.

The section applying to districts under boards of directors is quite different. Here, the probationary period of two years may be wholly retrospective (that is, it may have been completed before the passage of the act); thereafter, a teacher, principal or superintendent who is reemployed shall be given a contract for not more than three years and may be dismissed without a hearing at the end of any school year before the expiration of his contract if the board determines to discontinue the school and transfer the pupils, to discontinue his particular type of service or to reduce the number of teachers on account of a decrease in pupil enrollment.

The new sections, taken together, seem to approximate a full-fledged tenure law for districts under boards of education and nothing more than the familiar type of "continuing contract law" for districts under boards of directors. Thus, it appears that Illinois has not gone quite as far as did Ohio in its new statute, described in an earlier article in this series, which amounts to a tenure law for districts having more than 800 pupils and sets up a sort of five year "term tenure" for smaller districts. The legislatures of both states have made major contributions to the confusion of the subject by enacting tenure laws in which the word "tenure" nowhere appears.

Michigan amended the tenure act to provide that boards of education may, at the time of reemploying administrative or supervisory employes upon the completion of the period of probationary service, decline to place these persons on permanent status in administrative or supervisory capacity. In this event such persons shall have permanent status as active teachers at a salary equal to the highest salary paid to an active teacher serving under their respective jurisdictions. This apparently is designed to leave the boards free to demote superintendents, principals or supervisors to the rank of senior active teachers without any question of violation of the tenure law.

Wisconsin repealed the tenure law *in toto* and, thus, won for itself the dubious distinction of being the first state ever to adopt a tenure law and subsequently abandon it entirely.

Michigan established a retirement system, similar in general to the state teachers' retirement fund plan, for all nonteaching employes regularly working sixty hours or more per month in the public schools. The act also covers nonteaching employes of the state and county school offices and of the colleges under the control of the state board of education.

Religious Law Opposed

THE Religious Released Time Law, which allows pupils to take religious instruction at certain periods during school time, has been recommended for repeal by a group of New York State kindergarten teachers.

The most outspoken opponents of the bill declared that the law seriously endangered the principle of separation of church and state. More than 100 teachers took part in the discussion. Among them was Kenneth Leslie, editor of *Protestant Digest,* who opposed the law.

Answering the arguments advanced by Dr. Everett Ross Clinchy, president of the National Conference of Christians and Jews, in favor of the law, Dr. Abraham Lefkowitz, principal of Samuel J. Tilden High School, pointed out that the law was an opening wedge for public support of parochial schools.

There is plenty of time outside of regular school hours for religious education, contended Mrs. Johanna M. Lindlof, member of the New York City board of education. She approves of religious instruction if it is given after regular classes have ended and strongly advocated the law's repeal.

Most of the speakers agreed that it is unfair to bring pressure upon school children, forcing them to attend religious centers during time that could much better be spent in the classroom for the common good of the class.

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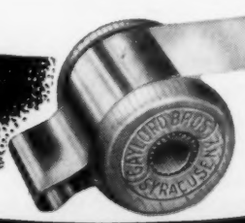

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Television—A New Tool

J. RAYMOND HUTCHINSON
Chairman, Committee on Television
Thomas Jefferson High School
Elizabeth, N. J.

Two scenes taken in the television studio of NBC, one showing the activities of aviation trades pupils and the other a scene from the comic operetta, "Pinafore."

MILLIONS of American pupils and teachers have been intrigued with the possibilities of television. This challenging medium of expression enables us not only to broaden our horizon but also to deepen our appreciation of the dynamic forces that either awaken men to reality or overwhelm them by the sheer weight of their number and complexity. The possibilities and ramifications of the art of television will come into focus only as we advance with it and attempt to learn its values for practical educational and recreational use.

The committee on television of the department of secondary teachers, National Education Association, has for some time been aware of the importance of television to the field of education. The objectives and purposes of this committee are as follows:

1. To advance the knowledge and the practical and efficient use of television in the field of education.

2. To conduct observation, study and research that will aid in establishing television as an educational medium in the home, the school, the church and community centers.

3. To assist individuals and groups to establish centers for study and observation of telecasts by providing information and assistance through personnel, publicity, bibliographical materials, collaboration, consultation and moral support.

4. To make the results of our own researches and studies, both those in which we have assisted and those submitted to us, available to interested groups through consultation, through publication of reports, monographs and books and through releases of pertinent information to educational magazines and other publications.

5. To organize, sponsor and conduct lectures, discussion groups and programs in television.

6. To keep abreast of the advance of television and its allied faculties, of facsimile and frequency modulation and other developments as they may be made here and abroad.

7. To disseminate information on the problems of television, with their solutions, through the cooperation of educators with the established agencies of government and the industry so that the benefits of television can be (a) made more readily available to the entire nation; (b) established on the most effective principles of use and service, and (c) continued on the established American principle of making the best programs available to the user with no direct fee or tax.

Those who are familiar with drama, the motion picture and the radio will realize something of the art of television when we say that all of these art forms contribute to television. But the real test of television must lie in the actual observation and study of telecasts.

Intriguing as the mechanics of television is, it is not the art of television any more than complete knowledge of the construction and repair that is essential for successful use of this means of transportation. We leave the production of the car to the automobile industry and the repair to the garageman and use the car for our purposes of pleasure or business. Perhaps the analogy can be carried along in television when it is applied to learning and entertainment. From the aspect of vocational training, the mechanics of television does offer a

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challenge for the best inventive and constructive minds, but space does not permit treatment of that subject in this article.

The novelty of television will fade with the establishment of this art form on a nationwide basis and education must be ready to meet the opportunities offered. Whatever thoughts are advanced on these possibilties and desires will be formative and embryonic, but it is essential that we think and act as they are developed.

The opportunity for self-advancement of the pupil will be greatly enhanced through the availability of a wider and deeper range of the realities of life through television. The full measure of advance is limited only by the ability to envision ideals and ideas. However, the reality provided by television should at lease broaden our vision and horizon of thinking through more complete and more accurate information and knowledge.

In order to facilitate the work of the committee, local distributors of television equipment have been cooperative in providing opportunities for groups of pupils and educational leaders to view telecasts in areas in which they are now available. The initial work of the committee has been carried on through the cooperation of the National Broadcasting Company.

Develop Activity Patterns

From the activities of pupils and educators in such centers, patterns for additional activity in other centers have been developed. For the uninitiated, the best insight into television can be gleaned from a tour of television facilities, such as that offered by the National Broadcasting Company at its studios in New York City. This tour gives basic information on the mechanics of television. While much can be gleaned from books and literature, this experience, which includes the telecasting of members of the group, gives a rich personal experience that creates a lasting impression on the participant.

The next step is to observe telecast programs and, through the use of questionnaires and discussion, to glean some of the applications of television to educational needs.

The third step is the establishment of the type of programs desired through the cooperation of the audiences and the industry. Check lists and evaluation sheets of the likes of the observer are now provided as a regular service to users of telecasts offered by station W2XBS. These provide an excellent measuring device of desires in types of programs.

The next step is formative, namely, establishing the time of day during which telecasts of specific types are desired. This information can be obtained through the use of questionnaires. This selection of the time of day for programs must be worked out jointly with educators, the industry and pupils.

Another step or problem is the question of repetition of all or part of a program that is found to be educational. Transcriptions of radio programs have solved this problem in radio and records of a filmic type might solve this problem for television.

Selection of Materials

This leads to the problem of selecting the types of materials needed for educational use. The art of television may, for example, find its greatest power in presenting spot news events while they are becoming history. Filmic records could preserve these events for retelecasts or use in the classroom.

A final consideration is determining the scope of programs that can be telecast; the range is wide. Telecasts already given over station W2XBS, now station WNBT, may be divided into 30 classifications of material, most of which have educational appeal for specific groups.

Those areas of knowledge that are enhanced through the use of sight and sound have a place in the field of television and effective use can be made of them in their rightful sphere of time and place in the educational category. Herein lies the challenge for educators; it calls for a plan of action that embraces the following activities:

1. Intensive study of the literature on television and the activity of the television industry.

2. Selection of personnel in educational centers for sustained study of television. This selection should include graduate and undergraduate college students, high school and junior high school pupils and leading educators.

3. Preparation of plans for objective observation and study for evaluation of telecasts, particularly for educational purposes.

Bibliographies on television will be supplied upon request, as will detailed information on plans for group and individual participation in television study. Under the direction of Brother Ignatius F.S.C., a college group of 10 students of La Salle College of Philadelphia was probably the first of its type to study television. Members of the Audio-Visual Club of Thomas Jefferson High School, Elizabeth, N. J., was the first high school group to begin objective study of telecasts. The committee on television of the department of secondary education began its group activity in New York City on March 1, 1940.

During the last year, we have witnessed growth in the size of the pictures from approximately 12 inches in width to a size of 15 by 20 feet. We have also observed the initiation of color telecasts. The first college course in programming was given at New York University under the direction of T. H. Hutchinson, former television program director of the National Broadcasting Company. More recently, a short course on television programming has been offered by Catherine Sibley of the Don Lee Studio at the University of California, Los Angeles. Television programming study is as essential for educators as it is for the telecasting companies.

Television a Reality

Demonstrations and discussions of television have played a part in the meetings of the National Association for the Advancement of Science and the department of secondary teachers of the National Education Association during the past year. Broadcasts by national leaders on television have been given also, and the present outlook for television activity as an industry makes this medium of expression a "grown-up" reality.

Television, therefore, is an immediate challenge for educators. An intelligent solution of the educational problems will be more readily reached through cognizance of the scope of the problem.

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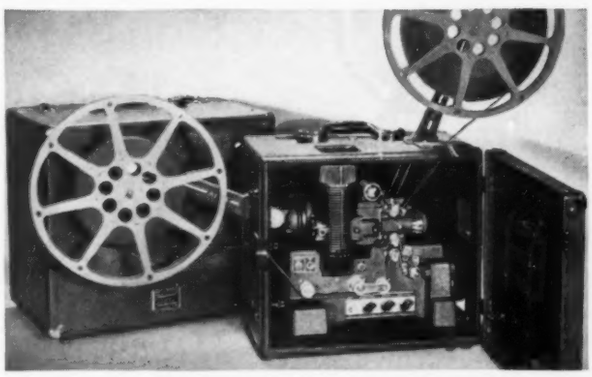

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School Broadcasts Are Effective Public Relations Medium, Survey Reveals

In an attempt to measure the effectiveness of the state-sponsored radio broadcast, "Maine Schools on the Air," as a public relations medium, a study was made to find the answers to three major questions: (1) Do people listen to educational radio programs? (2) Is public opinion changed by the broadcasts? (3) Does any action result from these broadcasts? The conclusions drawn from the survey were reported in a recent issue of the Maine State School *Bulletin*.

A postcard poll on the first question revealed that 8 per cent of those queried listen to every broadcast and nearly 40 per cent listen occasionally.

That public opinion is actually influenced by the broadcasts was proved by questionnaires sent out before and after a broadcast on the work of the N.Y.A. in Maine schools. Comparison of the answers to the two sets of questions indicated a considerable revision of opinion among those who listened to the program.

Twenty case studies, selected from a collection of several hundred, showed the benefits that have resulted to Maine schools that can be directly traced to the school broadcasts.

In general, the *Bulletin* points out, the study proved that the broadcasts are highly effective and that a similar program could probably be adopted in other states with equally satisfactory results.

Democracy Explained in Program

A series of radio programs designed to explain the democratic way of life is being prepared by the division of radio education at Indiana State Teachers College in collaboration with the U. S. Office of Education. The programs, under the general title, "We've Got Something Here," will be produced experimentally by Indiana State Teachers College students under the direction of Dr. Clarence Morgan, director of radio education at Indiana State.

Bibliography of Visual Aids

Literature and visual aids suitable for classroom use that can be obtained from the National Association of Manufacturers in New York City are listed in the association's new "Bibliography of Economic and Social Study Material." The audio-visual materials listed include nine motion pictures, four sound strip films, five silent strip films, five sets of lantern slides and several groups of bulletin board posters.

Music Appreciation Text Revised

"Music and Romance," the music appreciation text published by RCA Victor, has been completely revised, it was announced recently. Each chapter has been rewritten to bring it up to date and sections have been added on the history of American music, both in the United States and in the other North American countries.

Films in Review

BODY DEFENSES AGAINST DISEASE: 16 *mm., sound.* 400 *feet.* 1 *reel.* 10 *minutes. Erpi Classroom Films, Inc. Subjects: health education, biology and physiology. Grades:* 4 *through college. Rating A—.*

This film offers an exposition of the body's three lines of defense, *i.e.* the skin, the phagocytic and lymphatic cells and the blood, including a section on immunology.

A magnified cross section of the skin shows how it acts as a defense against the bacteria that are trying to enter. Microphotography of phagocytosis is shown with applications of the defense mechanism in specific cases. The blood absorbs some of these impurities, part of which flow through the liver and are absorbed, others remaining in the blood stream. The action of the liver and spleen together with types of antibodies and their effects is dealt with.

A good use has been made of animated photography. The film can be used to teach a subject that is otherwise difficult to handle effectively. — *Reviewed by* PAUL V. THORNLEY.

PERU. 16 *mm., silent.* 400 *feet.* 1 *reel.* 12 *minutes. Eastman Teaching Films, Inc. Subject: geography, social studies. Grades:* 4 *to* 8. *Rating C.*

This movie on Peru shows an overview of the country but does not develop the industries to any extent. A relief map shows the location of the country in South America and the three topographical regions within it. The chief crops, sugar, cotton, and rice; the animals, cattle, llamas, alpacas and vicuñas, and the minerals, copper, gold and silver, are all illustrated. Trains are pictured going over the mountains and valleys through long tunnels. The Inca ruins and present day building are shown as the natives are wandering about.

The photography is poor so that many of the important and interesting details are too indistinct to be seen clearly. The picture can be used in the geography or social studies classes in the later elementary and junior high schools.—*Reviewed by* MARGARET STEVENSON.

Short Masterpieces Recorded

Transcriptions of short masterpieces of music are being made available to schools by the educational department of the Longines-Wittnauer Watch Company, New York City, sponsors of the "World's Most Honored Music" program. The transcriptions are devoted to the shorter compositions or nonsymphonic works of such composers as Mendelssohn, Brahms, Beethoven, Tschaikowsky and Chopin.

Special Album for Children

An album for children from the ages of 3 to 10, titled "Songs of the Zoo," has been added to the Blue Bird record set of the RCA Manufacturing Company. The program is sung by John and Lucy Allison, who composed the songs.

Film Releases

Scrooge—Dicken's "Christmas Carol" in 16 mm. sound. The film follows the story from first to last, opening on Christmas Eve and carrying Scrooge through his experiences with the ghosts of the Christmas Spirits. One hour long. Pictures, Inc., 1600 Broadway, New York City.

Power for Defense—Produced by the film unit of the Office for Emergency Management, the film reports on the defense activities using TVA power in the Tennessee Valley. 16 mm. sound. 1 reel, 10 minutes. Division of Information, Office for Emergency Management, Washington, D. C.

Kentucky Pioneers—Set in the 1780's, the film portrays representative aspects of the early pioneering movement into the Kentucky Territory. Weaving, soap making, cooking, carpentry, cabin construction and schooling are some of the activities shown. 16 mm. sound. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

Music of the Masters—A series of 16 mm. sound shorts featuring such outstanding artists as Jose Iturbi, Mildred Dilling, the Coolidge quartet, Vronsky and Babin, Emanuel Feuermann and Igor Gorin. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York City.

Monastery—Seven reel, 16 mm. sound film dealing with the life, customs, organization and functioning of several monastic orders. The monks are shown entering the orders and performing their various tasks. Audio Film Libraries, 661 Bloomfield Ave., Bloomfield, N. J.

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Edna St. Vincent Millay in Readings from Her Poems. Album M-836. 4 records.

Noël (Chadwick). Hans Kindler and National Symphony Orchestra. 18274.

An Album of Art Songs, Sung in English, French, and Italian by Richard Crooks. Album M-846. 5 records.

Suite "From Childhood" (Harl McDonald). Edna Phillips, Harpist, and Philadelphia Orchestra under H. McDonald. Album M-839. 3 records.

•

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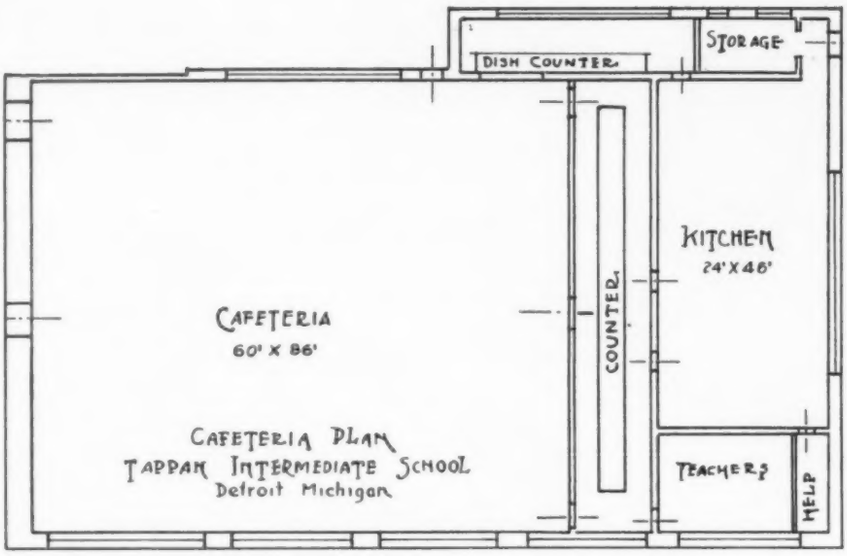
Hospitality in the Lunchroom

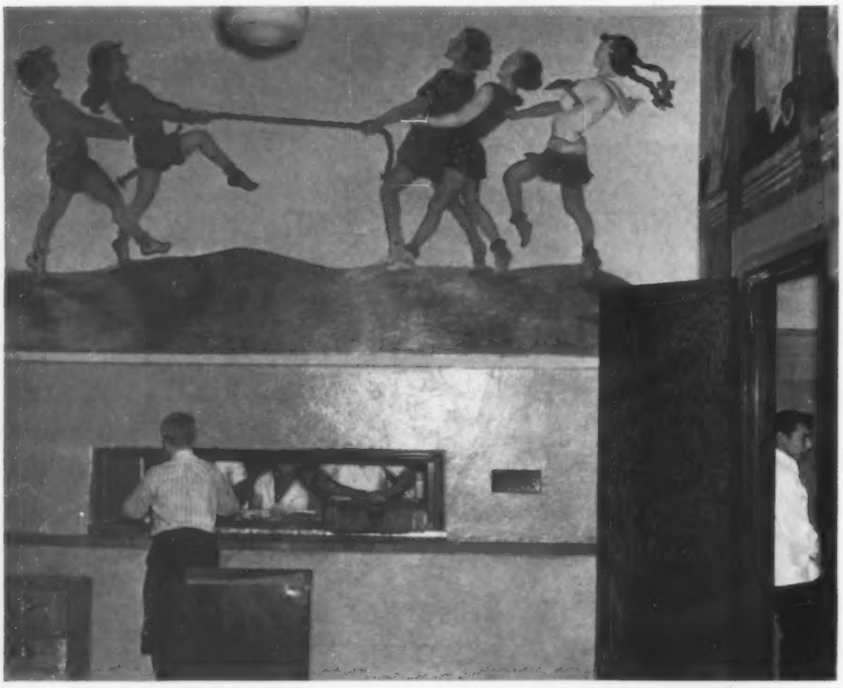
C. E. FRAZER CLARK
Principal
Tappan Intermediate School, Detroit



THE aim of the cafeteria of the Tappan Intermediate School, Detroit, is to give the pupil the best food at the lowest cost, served appetizingly in the most hospitable surroundings. Here daily, except Saturday and Sunday, a lunch is served to from 1400 to 1600 pupils. In some cases this lunch is their best meal of the day. Children should be taught to be as particular in food selection as adults and should be so instructed in school that they will profit the rest of their lives.

The seating capacity of the Tappan cafeteria is 520. All pupils are assigned permanent places and are responsible for the appearance of their places when they leave. The line opens at 10:30 a.m. and serves until 1 p.m., during which time classes are constantly coming and going.

As will be seen from the accompanying floor plan, the lunch line divides in the center at the service counter, going to the right for the "à la carte" luncheon and to the left for the 12 cent plate lunch. This daily plate lunch is served to those who wish a complete yet inexpensive luncheon. It includes a half pint bottle of pasteurized milk, two slices of buttered bread or rolls, a plate of hot food and dessert. If this does not completely satisfy the pupil's appetite, the à la carte side of the service counter furnishes him with a wide variety of selections, including fish, meats, salads, sandwiches, vegetables, soups, milk or chocolate milk and candy bars. These candies, however, are at the last station and can be bought only with lunch.



Art pupils dressed up the walls of their cafeteria with mural paintings.

The food, with the exception of two-crusted pies and bread, is prepared in our own kitchen. All orders for fruits, vegetables, butter, eggs and cheese are sent to the main office of the lunchroom department by the dietitian, Mrs. Quin C. Yetter, two weeks in advance, together with the menus covering the same period. These supplies are then purchased through the purchasing department of the board of education. All meats are ordered through one vendor assigned to us each year by the lunchroom department. We turn over all funds to this department, which, in turn, reimburses the vendor at contract prices.

The main office of the Detroit board of education, through its personnel department, furnishes us the necessary help and substitutes.

The paid personnel in the cafeteria consists of a director or dietitian,

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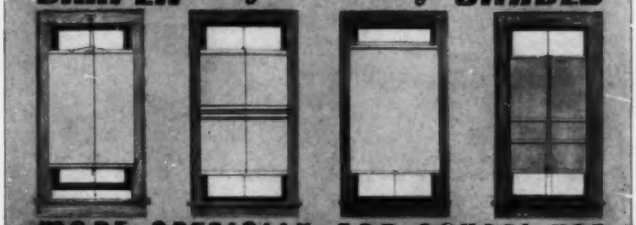

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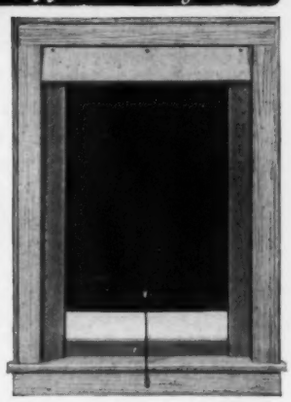

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Left: The kitchen of Tappan School is a busy place. All of the food except for two-crusted pies and bread is prepared here. The staff consists of a cook and her assistant, two pastry cooks, two salad makers and eight general workers. Below: Five counter women serve the pupils from this appetizing array during the lunch hour.

one cook and assistant, two pastry cooks, two salad makers, eight general workers, two checkers, two cashiers and five counter women.

The duties of the dietitian are to make out the menus one week in advance, to order all foods and to supervise food preparation, inspection of help, service of meals and banquets and pay rolls. The cooks report at 7 a.m., while the general workers report at 10 a.m. and work until 2:30 p.m. All receive lunch and an average weekly issue of two Hoover aprons and three bib aprons, in addition to their pay.

During the lunch period the pupil is allowed to relax and enjoy his lunch with the minimum of supervision. Conversation is permitted at the table and at the end of his lunch period the pupil carries his tray and dishes to the counter that leads into the dishwashing room. Here the steam hot-water dishwashing machine cleans and dries the dishes and silverware within a few minutes. It is estimated that the china is used on an average of four times during the lunch period while the silverware is constantly being washed and put in service.

In this room six women are busily engaged during the rush hour. Two of these are "scrapers" who prepare the dishes for the washing machine, which is operated by one helper. As the dishes, trays and silverware come through the machine there are three "wipers" who speed the drying process and rush the equipment back into service.

Ten pupil assistants work in the cafeteria but receive no remuneration. Their duties are to check the arrival and departure of classes on schedule, the replacing of empty milk bottles in their cases and the replenishing of clean trays and silverware and to handle emergencies. They are furnished with a white laundered coat while on this duty. At the beginning of the lunch period the cafeteria is comfortably filled and a steady inflow is maintained of 42 pupils (one homeroom) every two minutes. Each group is allowed twenty five minutes for lunch.

In 1933 the pupils decided to dress up the main dining room with murals. The art classes purchased the necessary paints and brushes and, under the supervision of their instructor, the murals were completed the following year. One lunch table was fastened to the top of another and small groups of art pupils stood on step ladders and painted scenes that depict various activities inside and outside the school. The total cost of the material and paints was about $10.

It has always been a pleasure to feed these school children and to see them enjoy their food. Good food at small cost to the child's parents pays big dividends in high morale and good behavior, as well as in health. About half of the student body buys the 12 cent plate lunch; the others are attracted by the à la carte selection.

When parents happen to be in the building near lunch time they are always invited to be the school's guests for luncheon. This permits the school to show them just what their children are having for their noon meal. It also shows them the environment and the congenial time their children are enjoying during the break in the classroom routine. We also believe that it encourages the feeling of hospitality, which should be of paramount importance in all dining rooms.

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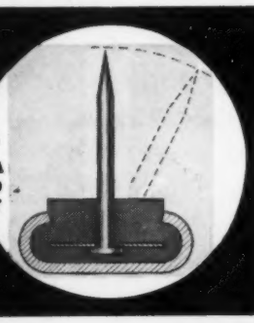

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Standardize—and Save

NEOSHO FREDENBURG
Cafeteria Director, Topeka High School, Topeka, Kan.

FOR many years the important commercial houses have established and maintained certain standards in food and in size of servings. By checking their food percentages closely they are able to keep prices in balance and to give their customers the advantage in purchase price without incurring any loss to themselves.

It is to be expected that a plan so successful would find favor in such organizations as school cafeterias where the percentage of profit is small. Standardizing of food is necessary not only for financial control but as a method of checking food production. It has also been proved to result in greater satisfaction for the patron.

The procedure followed in testing recipes is simplified when it is carried out by the test kitchen. In many of the larger systems it is possible to put one or more persons in charge of testing and developing new recipes and, in some cases, to have a visiting dietitian who helps the various units reach and maintain the standards that have been established.

In the small system the manager, with the help of her kitchen employes, establishes her own standards. If the kitchen organization is efficient, little time can be spared during the daily routine for experimentation. It is a wise plan for the manager in this case to standardize all portions without her employes' help as far as possible; to develop specifications for staples, canned goods and all materials used in cooking; to make decisions as to scoops and ladles to be used for vegetable and salad combinations, and to establish weights and slices for various meat servings, and sizes and amounts for fruit desserts and sandwich fillings. This preliminary work will enable her to eliminate all standardization except actual recipe testing.

Inasmuch as early morning is the most important food production period, this time spent with the various departments affords the dietitian the opportunity of checking proper procedure and results. One checking is not adequate because some formulas must be checked several times before results are accurate and standard. Kitchen employes, as a rule, are cooperative and interested in new ideas.

The actual testing and standardizing of recipes must be preceded by the purchase of a uniform quality of raw food, because varying results are obtained unless the same quality of ingredients is provided.

The recipe or food formula must be stated in units that eliminate possible error, such as pounds of flour, butter and sugar, instead of quarts and cups. Weight is far more accurate than measure.

Recipes should be clear and definite in their wording; they should state mixing time and speed, as well as utensil size and temperatures. Size and cost of serving and the number of servings per recipe should be figured.

After developing a palatable, nourishing and attractive dish through a tested recipe, part of the objective is lost unless a check is made of the number of servings actually produced. A counter check will prove the popularity of the dish and adding the leftover portions will furnish the actual count of servings per recipe. It is possible to figure the cost very closely.

The accompanying forms are useful and may be adjusted to suit individual preference.

Equivalent Weights

16 oz. = 1 lb.
2 c. butter = 1 lb.
2 tbsp. butter = 1 oz.
2 c. chopped meat = 1 lb.
2 c. sugar = 1 lb.
2 tbsp. sugar = 1 oz.
2⅔ c. brown sugar = 1 lb.
2 c. Crisco = 1 lb.
4 c. = 1 qt.
4 c. cocoa = 1 lb.
4 tbsp. flour = 1 oz.
32 oz. flour = 1 qt.
10 med. eggs = 1 lb.
8 egg whites = 1 c.
8 egg yolks = ½ c.
60 lbs. potatoes = 1 bu.

Yield of Foodstuffs (Weight, Count, Scoop, Serving)

Item	*Weight*	*Can Size*	*Count*	*Scoop*
Peas—frozen	2½ lbs.		23-24 serv.	16
	5 lbs.		50-52 serv.	16
canned	6 lbs., 9 oz.	10	27 serv.	12
	8 lbs., 9 oz.	10	39 serv.	16

Recipe Card—Buttered Noodles

Ingredients	*Weight Measure*	*Unit Cost*	*Total Cost*
Noodles	16 lbs.	@ $0.06	$0.96
Water	50 lbs. (25 qts.)	.....	.....
Butter	3 lbs.	@ .25½	.765
Salt	½ lb.	@ .01	.005
Total weight	69 lbs., 8 oz. (1112 oz.)	Total cost	$1.73
Shrinkage	200 oz.		
Net Weight	912 oz.		

Total servings, 304. Cost per serving, $0.0057. For 3 oz. serving weight, measure ¾c.

Recipe Cost Sheet—Lamb and Noodles

	Recipe	*Portion*	*Per Cent*
Selling price	$15.00	$0.05	100
Cost	6.67	.0217	43.4
Profit	$ 8.33	$0.0283	56.6

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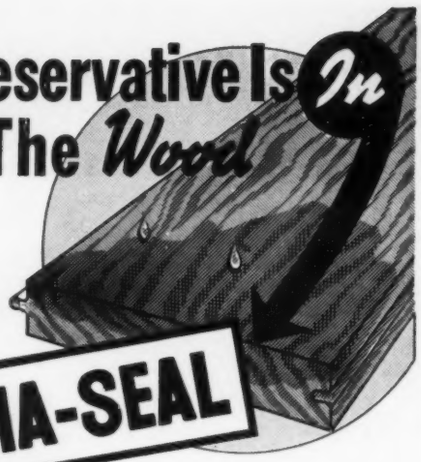

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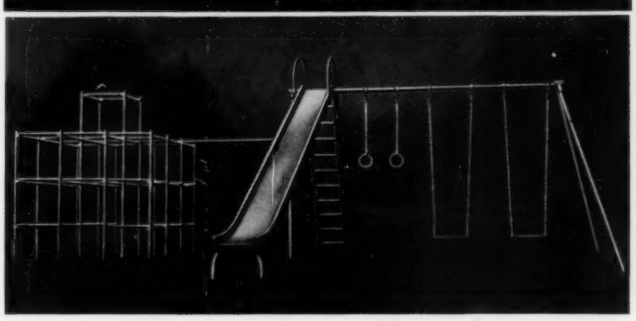

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O, give me a spine not entirely supine
When little Johnnie's mamma comes to call.
And strengthen my chin while I take it and grin,
Though the plaster and loving cups fall.
Provide me a chair upholstered with care
And plushed with the down of the duck;
And lend me an hour, or a century sour,
Then wish me the best kind of luck.

For the darling little Johnnie ain't what he used to be; his mamma's on the warpath and I am her scalpee. Johnnie flunked his history, in math he took a slip; without excuse he battered his tender scholarship. While dawdling on the playground that young imp seized a rock and with homicidal intent he gave his pal a sock. So, in a firm but kindly way, I took him by the neck and I shook his little torso until it was a wreck. All education stood aghast to hear young Johnnie bawl, and they said, "It won't be long till Johnnie's mamma comes to call."

I mustn't be rough when the listening gets tough
When little Johnnie's mamma comes to call,
But stand I serene 'mid the blitzes that scream—
Alert where the heavy bombs fall.
O, give me an ear that refuses to hear
When the siren shall threaten and moan;
A judicial air, and a vacuous stare
And a reenforced concrete backbone.

When mamma starts her blitzkrieg, the whole world knows it's true that she's a fighting fortress and a mighty big one, too. The world is filled with thunder and the heavens shake with dread; the things that mamma says are sometimes better left unsaid. Yo, ho! the tanks are rolling, the air grows tense and blue; with faces pale the stenos quail when mamma barges through.

So, fetch my shining armor, my helmet and my mask, and hand me down my tommy-gun to fit me for the task. I am fighting in a righteous cause and so, for weal or woe, give me grace and understanding to tell mamma where to go.

THE merry, merry month of December is when the child-centered school comes into its own. The Indian Village and The Ubiquitous Postoffice are dismantled in favor of the Grocery Basket Project wherein little Oscar learns the skill of borrowing the last can of beans from the family larder in order to meet the room quota for sweet charity.

The halls are filled with carols, alumni home from college, little sisters left by shopping mothers and other reminders of good will among men. On teachers' desks gleam the gift apples and oranges along with the Christmas tree bulbs, which are past their gleaming.

Despite the under-cover cacaphony of 45 little opportunists, the supervisor arrives to view the scene with somewhat more tolerance than usual and the superintendent pays his semiannual visit to check up on the instructional processes with one eye on the glories of the Chirstmas tree and the other on the amateur wiring.

Meanwhile, the school attic has been ransacked for the Santa Claus suit that was thoughtlessly remodeled last Halloween for an emergency pirate and never restored. Quick work on the part of the sewing mothers saves the day and the unfattened janitor volunteers for service as Kris Kringle until such time as the littlest kindergartener may shout in disgust, "Aw, its only Eddie with a beard on."

'Tis December. Outside the cozy classroom the snow falls steadily and the wind whooshes around the corners while down in the hellhole the fireman stokes with profanity and zeal. But inside the room, the fountain of youth bubbles and sings with rising harmony and the music is balm to the soul of a troubled world and peace to the heart of man.

There may be other jobs that have more privileges than that of a school teacher. There may be fields of work where the boss is more glamorous and the pay check more lucrative. There may be positions of trust and responsibility that bring more of fame and fortune. But who cares? 'Tis December. We are teachers of the sons and daughters of America—and may God bless us every one.

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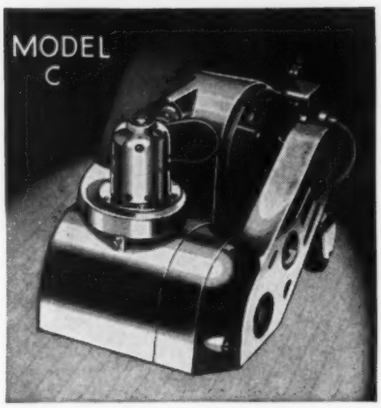

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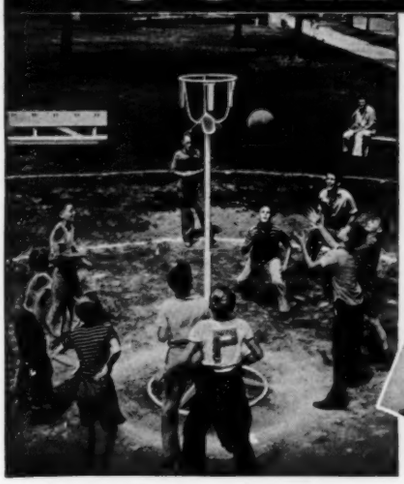

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Director of Physical Education and Varsity Basketball Coach, University of Kansas, Lawrence, Kansas

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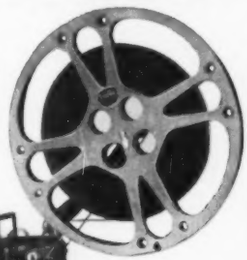

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News in Review

Schoolhouse Construction Meeting

Major attention was given to the critical conditions confronting school plant development during the current emergency by the National Council on Schoolhouse Construction at its nineteenth annual conference held at Virginia Beach, Va., November 10 to 13.

Resolutions were passed for transmission to President Roosevelt and the Office of Production Management calling attention to the fact that public education is the first line of internal defense in the maintenance and improvement of democracy and recommending that special attention be given priorities and allocations of critical materials needed in schoolhouse construction.

Specialized aspects of schoolhouse planning were presented in the several discussions, including "Gymnasiums and Physical Education Facilities" and "Layouts of Administrative Rooms" by C. L. Wooldridge, associate superintendent of schools, Pittsburgh; "School Libraries" by Raymond V. Long of the Virginia State Board of Education; "High School Science Rooms," by W. G. Eckles of the Mississippi State Department of Education, and "Public Works Reserve and Long Range Studies of School Plant Needs," by Alice Barrows, building specialist for the Office of Education.

A. C. Shire, technical adviser to the U. S. Housing Authority, discussed "Technical Developments in Building Materials and Construction in Relation to School Constructions," with emphasis on the desirability of providing temporary buildings in defense areas.

Experience with defense housing on the part of council members in different parts of the country indicated that the number of children per defense family ranged from one to a small fraction of a child, which is considerably less than half as many as officially estimated by the U. S. Office of Education.

The major conference emphasis was placed, as usual, upon the consideration of new construction standards and the revision of existing standards. In accord with current tendencies, the conventional term "blackboard" was changed to the more comprehensive description, "chalk or crayon boards."

A new method of interconference study of desirable changes in standards through the use of numerous subcommittees was adopted. Reports on the successful completion of objective standards for folding chairs and desk chairs were made by Raymond V. Long and Hugh B. Johnson. These standards will be published by the American Council on Education.

N. E. Viles, director of school building service for Missouri, was chosen president to succeed John W. Lewis, assistant superintendent of the Baltimore public schools. Thomas J. Higgins, assistant director of the bureau of building surveys, Chicago public schools, was named vice president and Prof. Ray L. Hamon of Peabody College was reelected secretary-treasurer for another one year term. John E. Nichols, supervisor of buildings and plans, Connecticut State Department of Education, was elected chairman of the executive committee, succeeding Thomas J. Higgins of Chicago.

MEETINGS

Food Service Directors Meet

Talks, demonstrations, exhibits, field trips and a unique feature designated as a "town meeting" kept those attending the seventh annual Conference of Food Service Directors busy during their three day stay in New York. Attendance, good; interest, high; benefits, great was the general feeling expressed when members of the group disbanded exhausted but with copious notes and mental pictures to carry home with them.

Because of its novelty the "town meeting" stole the show; also, because of the fact that in a comparatively brief period six speakers of outstanding reputation expressed various viewpoints on the modern school cafeteria. They were followed by questions and general discussion.

Speaking from the standpoint of the school superintendent, Worth McClure, superintendent of schools, Seattle, described the cafeteria as an integral part of the educational program because it teaches both social relationships and correct eating for good health.

Nutrition is now front page news because of the national emergency, according to Mrs. Dora Lewis, New York University, New York City. Therefore, it is time for the cafeteria managers, the home economics department, parents and all others who are concerned to get together as a team, if they have not already done so.

"We should capitalize on the present wave of awareness because there are so many more agencies to work with," Mrs. Lewis urged. Here are a few of the things pupils are doing, and should be doing, in a well-managed cafeteria: checking lunches; changing posters often; trying to improve the eating habits of those who consistently choose poor lunches, and making use of the homeroom period to introduce new food and general information on nutrition and instruction from the consumer point of view.

Mary deGarmo Bryan, head of institution management, Teachers College, Columbia University, acting as moderator, later stated how important is the use of homeroom periods in teaching children about nutrition.

Nutrition education is an important part of health education. In making this statement Harriet Stone, nutritionist, board of education, Newark, N. J., urged that classroom teachers be used more extensively and suggested that they be brought into the cafeteria to eat and to feel its importance, not as an outside activity but as an integral part of their pupils' education. As inducements to further interest she suggested that menus be passed around to the classroom with new items starred, that a class plan one day's menu and that graphs and charts be made up to show certain good combinations.

Pauline Murrah described the nutritional work being carried on by the New York City department of health. The department is chiefly concerned with the adults, that is, the parents of the children who are eating in the cafeteria. Refresher courses are being established for certain dietitians who feel the need of being brought up to date on family nutrition. It is possible that similar opportunities will be offered to home economics teachers.

Dr. Grace MacLeod, Teachers College, Columbia University, pointed out that nutrition has been making steady progress during the last twenty-five years rather than only recently, as some people evidently think.

Cafeteria Directors Meet

Approximately 300 cafeteria directors and others interested in nutrition planning representing all sections of the country gathered in San Antonio, Tex., to attend the sixth annual convention of the National School Cafeteria Association. The program was divided into sectional and group conferences, demonstrations and visits to San Antonio schools. The exchange of ideas and the discussion of common problems proved profitable to all those present.

A feature of the meeting was a merit award for a course of study for school cafeteria employes presented by Marion E. Hallett, director of cafeterias, Evansville, Ind. This award was made by Mrs. Elsmer W. Addkison, director, Central High School cafeteria, Jackson, Miss.

Science Field Trip

One hundred and twenty-five St. Louis teachers participated in a three day field trip at Camp Sherwood Forest near St. Louis as part of the science conference held in late October by the St. Louis District of the Missouri State Teachers Association and the St. Louis Association for Childhood Education. Teachers interested in science explored the hills and meadows of the surrounding countryside and studied plant and animal life. The conference opened in St. Louis with a series of meetings before the field trip.

NATIONAL DEFENSE

Motion Pictures for Defense

Motion pictures for training defense workers will shortly be made available on an unprecedented scale through the terms of a contract made by the U. S. Office of Education with Castle Films, Inc. The contract, which was awarded on a competitive basis, calls for the nation-wide distribution of fifty 16 mm. sound films at less than $9 a reel.

The library of 50 reels, 18 of which have been completed, is planned to cover intensively all phases of machine shop practice in precision metal working. Subjects covered include precision measuring, engine lathe, milling, drills of various types and ship building. The films were produced by several commercial film companies following a pattern laid down by the Office of Education. Material used in the scripts was coordinated to standardize machine shop practice and terminology, which differ greatly in various sections of the country.

It is the intention of the Office of Education to build its film program in terms of the specific needs of defense training.

School Defense Program

From October 8 to November 8, inclusive, President Roosevelt approved 153 Defense Public Works projects for the construction or maintenance and operation of schools because of increased needs for educational facilities in defense areas throughout the nation.

The total estimated cost of the school projects approved during the month is $4,843,559, of which $2,910,275 was for the construction of 83 schools or school additions and $1,933,284 was for 70 projects to furnish federal funds for the maintenance and operation of schools.

The federal contributions from D.P.W. funds for the maintenance and operation of schools now total $3,278,056 for 95 projects in areas where increased defense activities have so overburdened school budgets that federal aid for current expenses and other necessary costs was imperative.

Defense starts in the office
Don't handcuff management!
Before any piece of production equipment is purchased—before a single wheel turns—there must be hours and hours of paper work by executives, engineers and department heads.
So—thank the office force as well as your shop chief if you're meeting production schedules. With the ever-increasing complexities of defense work, management has one tough job.
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TRANSPORTATION

Good Maintenance Practices Urged

Fleet owners and operators of single buses and trucks have been requested to institute sound maintenance measures by John L. Rogers, chairman of the central motor transportation committee, Office for Emergency Management. In a report to Ralph Budd, transportation commissioner, Mr. Rogers pointed out that good servicing programs will result in a reduction of costly road repairs and of the time vehicles are laid up for repairs and also in longer life for the machine.

Rubber is a vital defense factor, Mr. Rogers declared, and must be zealously protected. Commercial vehicle operators can do their part by checking tires frequently for cuts and bruises and by keeping them fully inflated. Fixed lubrication schedules should be observed so as to minimize the lay-up time of vehicles.

In closing his report, Mr. Rogers urged that all owners who do not maintain their own repair facilities should insist upon adherence to the fundamentals of sound preventive maintenance practices by the servicing concerns with which they deal.

ADMINISTRATION

Rockford Schools Close

A total lack of funds with which to operate the schools has given school children of Rockford, Ill., an enforced eight weeks' vacation and caused the town's 475 teachers to hunt other jobs to make up for three payless pay days.

In spite of a war boom that is pouring money into the town, the school system is financially unable to function until after January 5 when it can start operating with the 1942 budget. The paradoxical situation is said to have had its inception in 1931 when the Winnebago County board of tax review slashed city property valuations. In 1929 the city property valuation was $85,000,000, on which a $2 school tax levy was made. It is now $55,000,000 and the drop represents a difference of $375,000 annually in school revenue.

Standing idle and untenanted except for a skeleton crew of janitors and firemen are 23 school buildings, two of them outstanding senior high schools that were opened just a year ago.

Junior College Enrollment

Enrollment in junior colleges throughout the country has not been as severely affected by the defense program as had been expected, according to a study completed by the American Association of Junior Colleges. Public junior colleges have experienced a decrease in enrollment of only 10 per cent, the study revealed, while private institutions have had a slight increase of less than 1 per cent. An interesting change in emphasis of studies preferred by students is shown by the increased demand for technical, scientific and short business courses.

Athletic Benefit Plan

Membership in the Michigan state athletic accident benefit plan, which offers insurance to pupils against accidents and injuries incurred in physical education and athletic activities, surpassed its 1940-1941 record with a total of 332 schools and 10,877 pupils in October, it was reported. The addition of coverage for scheduled benefits in physical education and intramural activities above that provided for accidents occurring in interscholastic athletic practice is considered responsible for some of the increase.

ANNIVERSARIES

Bill of Rights Sesquicentennial

Nationwide observance of the sesquicentennial of the Bill of Rights on December 15 will be sponsored by the Council Against Intolerance in America. Special material will be sent to public schools stressing the importance of the bill to present day problems. This material will include a legibly printed copy of the Bill of Rights, suitable for framing; suggested plans for school and classroom participation in the observance; radio programs, records, books and correlated studies, and a play, "All-Out for the Bill of Rights."

Coming Meetings

Dec. 10-13—American Vocational Association, Hotel Statler, Boston.

Dec. 28-29—Southeastern Regional Conference of the Department of Classroom Teachers, National Education Association, University of Miami, Coral Gables, Fla.

Dec. 29-31—Pennsylvania State Education Association, Harrisburg.

Dec. 29-31—Illinois Education Association, Chicago.

Dec. 29-31—New York State Association of Secondary School Principals, Onondaga Hotel, Syracuse, N. Y.

Feb. 20-21—National Advisory Council on School Building Problems, St. Francis Hotel, San Francisco.

Feb. 21-26—American Association of School Administrators, San Francisco.

Feb. 26-28—American Association of Junior Colleges, Los Angeles.

April 1-4—Eastern Commercial Teachers Association, Lord Baltimore Hotel, Baltimore.

April 8-10—Inland Empire Education Association, Spokane, Wash.

April 8-11—Western Arts Association, Municipal Auditorium, Kansas City, Mo.

April 17-18—Idaho Education Association, Boise High School, Boise.

June 22—Summer Session, American Association for the Advancement of Science, University of Michigan, Ann Arbor.

AWARDS

Herman A. DeVry Honored

The Society of Motion Picture Engineers recently bestowed upon the late Herman A. DeVry, motion picture equipment manufacturer and inventor, its highest honor. By a unanimous decision of the members, Mr. DeVry's name was added to the society's honor roll, which was established in 1931 for the purpose of perpetuating the names of distinguished pioneers in the field. Mr. DeVry, who produced the first portable motion picture projector, thus became the first Chicagoan and the fifth American to be honored by the society.

PUBLICATIONS

Educating Superior Pupils

Current opinions and practices regarding the education of superior high school pupils are reviewed in a recent issue of the *Research Bulletin* of the National Education Association. A study was made in order to learn the points of view of high school principals and the actual provisions that are being made in junior and senior high schools for these pupils. Some of the conclusions that were drawn on the basis of the study are as follows:

1. Superior pupils should be given especially enriched programs of class work.
2. Most psychologists believe that the question of acceleration in school should be decided by the mental, physical and social maturity of the individual.
3. A varied offering of elective subjects contributes to the adequate education of superior pupils.
4. Extracurricular activities play an important part in the development of superior pupils.
5. Schools should take stock of their provisions for superior pupils periodically and make changes wherever present practice is contrary to expert opinion or to the results of careful experimentation.

Religious Study in School Hours

School children in nearly 500 communities of all sizes and in all sections of the country are now released from school during school hours for religious education, it was revealed in a study recently released by the U. S. Office of Education. The report compiled by Mary Dabney Davis, specialist in nursery-kindergarten-primary education, answers numerous questions regarding public school cooperation in religious education programs. Reports show that children in one out of every eight town and city school systems are released for religious study at their parents' request. Copies of the bulletin "Weekday Classes in Re-

ligious Education" are available from the Superintendent of Documents, Washington, D. C., at 10 cents each.

"People's Library"

The first phase of an experiment in writing informative books that are both useful and easy to comprehend, which has been conducted by the Readability Laboratory of the American Association for Adult Education, was completed recently with the presentation of 11 volumes called the "People's Library." The library is intended to deal with problems of the common man in his own language and to be distributed in a manner that will make it easy for people to get at it. More than 200,000 persons of an age range of from 11 years to "over 80" have read the books and their reactions indicate that the experiment has been highly successful.

INSTRUCTION

Travel Grants Awarded

Eight new travel grants have been awarded to a number of students from the Latin American republics, in addition to those previously awarded, it has been announced by the Department of State. These grants have been made available to students who otherwise would not have been able to take advantage of scholarships that had been awarded them in the United States. Congress has appropriated funds to pay the necessary travel expenses of the students. The geographical allocation of the additional awards is as follows: Argentina, Brazil, Chile, Colombia and Uruguay.

The State Department also announced the awarding of travel grants to two students from the United States to study in Brazil.

Pupils Make Nutrition Survey

One of the first programs launched in the statewide nutrition program in the Louisiana public schools is being carried on by home economics pupils in the senior class of Denham Springs High School, Denham Springs, La. A survey of the community's needs was made by the entire class with assistance from subcommittees from other classes, and on the basis of the facts revealed by the survey, the group is sponsoring a community program for health, recreation and nutrition.

Presentation of the data assembled in the survey was made at "Community Night" in the school auditorium and the support of every civic organization in town was enlisted. The program, conducted entirely by the girls, was based on a motif of patriotism and democratic cooperation.

One of the highlights of the evening was a panel discussion on "Nutrition Education and Recreation Facilities for Denham Springs," which was participated in by members of various groups.

HEALTH

Cancer Education in Schools

The progress made in educating pupils of the schools of Westchester County, New York, in the need for cancer control was reported by Dr. H. Richard Charlton in a recent issue of the *Bulletin* of the American Society for the Control of Cancer. "From twelve years of age onward through high school and into college," Doctor Charlton stated, "children, adolescents and youth will effectively absorb this subject. Under guidance, the young will take the subject into their homes, discuss it with their parents and watch their seniors intently, having been taught the only path to safety."

Doctor Charlton recommended the establishment of educational advisory boards in various experimental areas to disseminate cancer information to the life science courses in high schools and colleges.

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LEGISLATION

Marriage No Ban to Teaching

Marriage has ceased to be a handicap to New Jersey teachers since the enactment of a bill outlawing discrimination against married women teachers. The bill directs that "the right to hold office or employment shall be co-extensive with the right to vote, shall be equal as to all citizens and shall not be denied or abridged on account of sex or marital status."

NAMES IN NEWS

Superintendents

DR. CARROLL R. REED, who has served as superintendent of schools in Minneapolis since 1929, has been appointed to the position of assistant superintendent of schools in charge of curriculum revision, District of Columbia. Doctor Reed was president of the American Association of School Administrators in 1940-41 and is a member of the editorial board of The NATION'S SCHOOLS.

G. WELDON ASHFORD, superintendent of public schools at Stoutsville, Mo., for four years, recently assumed the duties of principal of Monroe City High School, Monroe City, Mo.

JAMES G. REARDON of Adams, Mass., former state commissioner of education, has been appointed superintendent of schools at Lenox, Mass. Prior to this appointment, Mr. Reardon was a federal government consultant on education. He has served as superintendent of schools at Bridgewater, Mass., and Adams, Mass. He was state commissioner of education from 1935 to 1939.

J. OTTO HUSTON, superintendent of Tilden School, Tilden, Mo., has resigned that position to accept a federal civil service post at Fort Thompson Indian Community School, Fort Thompson, S. D.

CHARLES W. LOCKWOOD of Laguna Beach, Calif., has been appointed to succeed JESSE R. OVERTURF as superintendent of schools at Palo Alto, Calif. Mr. Overturf has accepted the position of superintendent of Sacramento schools.

W. M. MELTON, superintendent of Oak Park School, Emanuel County, Georgia, has been elected superintendent of Leesburg Consolidated School, Leesburg, Ga., to succeed J. A. MCDONALD.

RALPH D. JENKINS, superintendent of schools, Englewood, Colo., has been reappointed for a four year period ending July 1, 1946.

A. W. HEINMILLER, director of procurement in the office of business affairs of the District of Columbia public schools, has been named assistant superintendent of schools in charge of the school budget.

DR. PAUL E. WITMEYER has been appointed superintendent of schools at Sharon, Pa.

SAMUEL B. BULLICK was elected superintendent of the school district of Greensburg, Pa., to fill the term of WILLIAM H. MCILHATTAN, who died last July. Mr. Bullick has been superintendent of schools in Scottdale, Pa., since 1921.

County Superintendents

GLENN W. IRVIN, principal of the junior high school at Patton Township, Pa., has been appointed to the post of assistant superintendent of schools in Allegheny County.

J. HARRY BLACKWELL has been named superintendent of special education in Clearfield and Elk counties, Pennsylvania. He will supervise special education efforts in the bi-county school system.

W. H. THOMAS has resigned as division superintendent of schools, Fauquier County, Virginia, a position he has held since 1929. C. M. BRADLEY, principal of Calverton High School, Calverton, Va., was chosen to succeed Mr. Thomas.

Principals

EDGAR PECKHAM, principal of Orwell High School, Orwell, Pa., has resigned to become principal of the high school at Ralston, Pa. He will be succeeded by LEON CRANDELL.

NOEL A. TAYLOR has resigned the position of principal of Williamstown High School, Williamstown, Pa., to accept a post with the Du Pont Company. CLAYTON VOGEL has been named to succeed him.

CHARLES LEMASTERS, instructor in social studies, has been named acting supervising principal at Mill Creek High School, Mill Creek, Pa., succeeding HOWARD H. DENISON, who was appointed assistant superintendent of the county school district.

ELI C. FOSTER, principal of Central High School, Tulsa, Okla., and assistant superintendent of schools in charge of secondary education, resigned to accept a post as professor of education at Oklahoma A. and M. College. MEREDITH M. BLACK was named principal of the high school in Mr. Foster's place.

RICHARD A. JENSEN has resigned as principal of Baldwinsville Free Academy, Baldwinsville, N. Y., to accept the superintendency of schools at Salamanca, N. Y.

KENNETH C. COULTER, supervising principal of schools, Jamesburg, N. J., has accepted a similar post at Glen Rock, N. J., where he succeeds STUART R. RACE.

N. P. BENTON has been named principal of the high school at York, Ala.

D. D. LAMPH has been named principal of Grantsville High School, Grantsville, Utah.

WILLIAM BRADFORD, teacher at Washington Preparatory School of the Central Y.M.C.A., Washington, D. C., has been named principal of the school to succeed LEROY J. MAAS. Mr. Maas has been named a director of the school and headmaster of the Woodward School for Boys.

PAUL BOWERS, principal of Edison High and Vocational School, Stockton, Calif., has been appointed acting director of the Stockton Evening High School.

JOHN P. LOUGHLIN, principal of the schools of Manchester, Kan., resigned recently to accept the position of instructor in the Army Air Corps technical school at Rantoul, Ill.

SIMEON KINSLEY, principal of Scituate Junior High School, Hope, R. I., has resigned to begin training for U.S.O. work. MRS. ESTHER TUCKER will succeed him.

EARL A. RAGER has resigned as principal of Junction School, Lewistown, Pa. ERNEST KRATZER has been named to succeed Mr. Rager.

WOODROW W. POWELL, principal of Statesboro High School, Statesboro, Ga., has resigned to accept a teaching fellowship at the University of North Carolina.

JOHN F. MCNEIL, principal of Erasmus Hall High School, Brooklyn, N. Y., since 1933, has been ordered into active service in the Air Corps with the rank of captain. ROBERT LAFFERANDER, assistant principal at Erasmus Hall, will succeed Captain McNeil.

FRANK MONROE, assistant high school and junior high school principal of Pampa, Tex., is the new principal of Midland High School, Midland, Tex. He replaced DON D. SHIFLETT, who held the position for fourteen years.

DR. WILLIAM R. LASHER, principal of James Madison High School, Brooklyn, N. Y., since 1930 and a member of the New York City school system for forty-two years, has applied for retirement.

MAURICE C. BOWER has been selected as supervising principal of Delaware City High School, Delaware City, Del. He will succeed R. ROGERS FOURACRE, who resigned recently to accept a position in private industry.

A. L. LYNN has been appointed athletic director and principal of Mansfield School, Mansfield, Tex.

EDGAR PADGETT, Ringgold, Ga., has been selected as principal and coach of Bowdon High School, Bowdon, Ga.

CLIFTON STRIKER has assumed his new duties as principal of Washington School, Allen County, Indiana, succeeding the late PETER VITZ.

JOHN PRYOR ATKINSON, principal of

Darvills High School, Darvills, Va., resigned November 1. He will be succeeded by SAMUEL BARNES.

In the Colleges

THEODORE A. DISTLER, dean of Lafayette College for the last seven years, has been elected president of Franklin and Marshall College to succeed the late DR. JOHN A. SCHAEFFER.

DR. LEROY E. COWLES, dean of the school of education, University of Utah, has been named president of the institution. He succeeds the retiring president, GEORGE THOMAS. Doctor Cowles' position as dean will be filled by DR. JOHN T. WAHLQUIST.

DEAN A. A. PAGE, who has been acting president of Pikeville Junior College, Pikeville, Ky., for the last year, has been permanently appointed president of the institution.

DR. KATHARINE BLUNT, who has been president of the Connecticut College for Women for the last twelve years, has announced that she will resign at the close of the academic year because she has passed the retirement age of 65. Doctor Blunt was called to the presidency of the college from the University of Chicago where she was chairman of the department of home economics.

DR. NOLEN M. IRBY was inaugurated as president of Arkansas State Teachers College, Conway, Ark., on November 14.

DR. JOHN G. BOWMAN, chancellor of the University of Pittsburgh since 1921, has announced his impending retirement. He will reach the retirement age of 65 next May.

Deaths

JOSEPH TRAVELLI GLENN, principal of the senior and junior high schools of Eureka, Calif., died recently of a heart ailment at the age of 64.

FRANK ELLSWORTH KENNEDY, a teacher and principal in schools of central Illinois for more than fifty years, died recently at the age of 79.

EARL BAUMER MARTIN, 54, of Tacoma, Wash., died recently. During his sixteen years in Tacoma, Mr. Martin had served as principal of the Park Avenue, Logan and Whitman schools.

DR. ROZELL BERRYMAN, for fifty years a teacher in the public schools of Baltimore, died October 1 at the age of 80.

LLOYD L. STERLING, principal of Dexter High School, Dexter, N. Y., died recently of a cerebral embolus.

R. B. FISHER, superintendent of schools, Corpus Christi, Tex., and president of Corpus Christi Junior College, died October 15 of double pneumonia.

DWIGHT H. PERKINS, leading educational architect and senior partner of the firm of Perkins, Wheeler and Will, Chicago, died November 2 at the age of 74. Mr. Perkins designed more than 200 school, park and public buildings. As architect for the Chicago public schools, he built the Carl Schurz and Bowen high schools and Trumbull Elementary School.

WALTER J. MASON, 68, principal of Central High School for Negroes, Galveston, Tex., died recently.

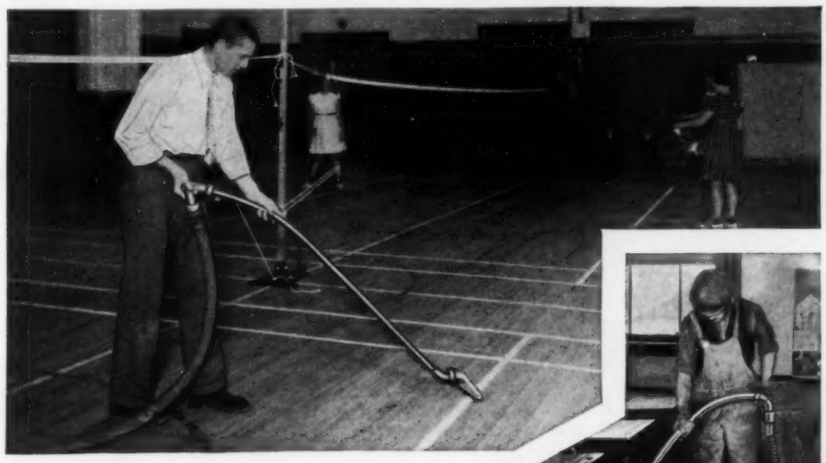
MERLE R. SCHROCK, assistant superintendent of schools, Somerset County, Pennsylvania, died recently at the age of 66.

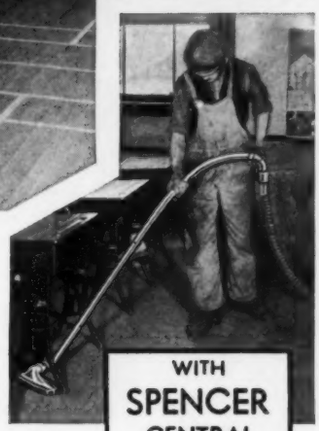
PAUL D. STONE, principal of Linlawn High School, Linlawn, Ind., for the last nineteen years, died recently at the age of 52.

Miscellaneous

OAKLEY FURNEY, chief of the bureau of industrial and technical education of the New York State education department, has been named state director of vocational education for defense workers.

DR. RALPH F. STREBEL, director of student teaching and placement of Syracuse University School of Education, was recently elected president of Kappa Phi Kappa, national education fraternity.





YOU PAY FOR VACUUM CLEANING, WHY NOT HAVE IT?

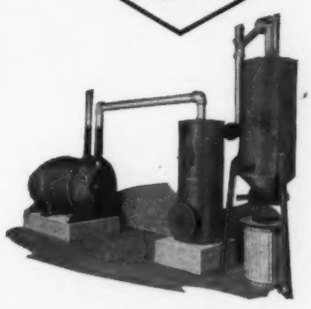
The following expense items are higher without vacuum than with it, according to reports from users of Spencer Vacuum.

Wear of Rugs	Polishing Time
Redecoration	Sweeping Compounds
Janitor's Time	Oils and Wax
Cleaning Screens	Chalk Nuisance
Cleaning Boilers	Projector Maintenance

Why save on first cost and perpetuate the above expenses?

Spencer vacuum tools and light-weight hose, with vacuum inlets in every room, provide health and economy for the life of the building. That's why prominent educators say, "It's the only way to properly clean a school."

WITH SPENCER CENTRAL VACUUM CLEANERS ALL DIRT AND DUST IS COLLECTED IN TANKS IN THE BASEMENT



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SPENCER HARTFORD CENTRAL AND PORTABLE VACUUM CLEANING SYSTEMS

THE SPENCER TURBINE COMPANY, HARTFORD, CONN.

The Bookshelf

General

PRINCIPLES AND PRACTICES OF TEACHING IN SECONDARY SCHOOLS. *By Thomas M. Risk. New York: American Book Company,* 1941. *Pp.* viii+728. $3.

MENTAL HYGIENE IN THE CLASSROOM. *Report of Joint Committee on Health in Education of the National Education Association and the American Medical Association. Chicago: American Medical Association,* 1941. *Pp.* 70. $0.20 *(Paper Cover).*

EVALUATION OF COMMENCEMENT PRACTICES. *By William L. Fink. Reading, Pa.: William L. Fink,* 1941. *Pp.* 71.

AN EXPERIMENT IN SCHOOL MUSIC-MAKING. *By Vernon Griffiths. Wellington, New Zealand: New Zealand Council for Educational Research,* 1941. *Pp.* xii+103.

• J-M Sanacoustic, applied to the ceiling of this school corridor, provides an attractive appearance and reduces noise to an undisturbing level. J-M Permacoustic, used in the auditorium, assures correct acoustics and pleasing decorative effect.

Shuffling feet, slamming doors, talking . . . all are typical corridor noises that combine to grate on nerves of students and teachers alike—often cause inattention and interfere with proper study. Yet such noises can be quickly and easily quieted at low cost by a J-M Sound-Control Treatment on ceiling or walls. Attractive, fireproof, easily cleaned, J-M Materials meet every requirement of school and university use. Wherever used—in corridors, classrooms, gymnasiums, auditoriums, etc.—they assure proper hearing conditions, reduce nerve strain. For complete information on J-M Sound-Control Methods and Materials, write for brochure AC-17A. Johns-Manville, 22 East 40th Street, New York, N. Y.

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A COMPLETE LINE OF ACOUSTICAL MATERIALS
PERMACOUSTIC . . . SANACOUSTIC . . . TRANSITE ACOUSTICAL UNITS
FIBRACOUSTIC . . . AIRACOUSTIC SHEETS

EXPLORING MUSIC. *By Vincent Jones and Bertha W. Bailey. Boston: C. C. Birchard & Company,* 1941.

PRACTICAL SCHOOL DISCIPLINE AND MENTAL HYGIENE. *By Norma E. Cutts and Nicholas Moseley. Boston: Houghton Mifflin Company,* 1941. *Pp.* x+324.

YOUTH THINKS IT THROUGH. *Selected and Edited by Francis L. Bacon and Others. New York: McGraw-Hill Book Company, Inc.,* 1941. *Pp.* 416.

BOY OF BABYLON. *By Frances Kent Gere. New York: Longmans, Green and Company,* 1941. *Pp.* ix+118. $2.

SCHOOL HOUSE FLOORS. *By C. L. Wooldridge and Others. Pittsburgh, Pa.: National Association of Public School Business Officials,* 1941. *Pp.* 16. *(Paper Cover.)*

ENCYCLOPEDIA OF EDUCATIONAL RESEARCH. *Edited by Walter S. Monroe. New York: The Macmillan Company,* 1941. *Pp.* xxiii+1344. $10.

SPEAK UP FOR DEMOCRACY. *By Edward L. Bernays. New York: The Viking Press,* 1941. *Pp.* xiv+127. $1.

THE TEACHING OF LANGUAGE IN THE PRIMARY GRADES. *By Dorothy Lothrop Brown and Marguerite Butterfield. New York: The Macmillan Company,* 1941. *Pp.* 235. $1.50.

ADVENTURES OF A G-MAN. *By Leslie C. Procter. Chicago: Beckley-Cardy Company,* 1941. *Pp.* 218. $1.50.

DUTIES OF SCHOOL PRINCIPALS. *By Paul B. Jacobson and William C. Reavis. New York: Prentice-Hall, Inc.,* 1941. *Pp.* xxiv+812. $3.50.

Textual

CONSERVATION OF THE NATION'S RESOURCES. *By Harry E. Flynn and Floyd E. Perkins. New York: The Macmillan Company,* 1941. *Pp.* x+385. $1.60.

CIVICS IN AMERICAN LIFE. *By James B. Edmonson and Arthur Dondineau. New York: The Macmillan Company,* 1941. *Pp.* xiii+702. $1.72.

HIGH SCHOOL COURSE IN SELF-APPRAISAL AND CAREERS. *By Grace E. Munson and Lester J. Schloerb. Chicago: Public Schools of Chicago,* 1941. *Pp.* 107.

STANDARD TEST LESSONS IN READING FOR SMALL SCHOOLS. *Prepared by W. A. McCall and Lelah M. Crabbs. New York: Bureau of Publications, Teachers College, Columbia University,* 1941. *Pp.* 90. $0.25. *(Price per package of* 10, *including student record cards,* $2.65, paper covers.)

UNIT TESTS IN THE SOCIAL STUDIES. *By H. E. Dewey. Yonkers-on-Hudson, N. Y.: World Book Company,* 1941. *Pp.* viii+95.

THE GREAT LAW OF OUR LAND: *A Text Workbook on the United States Constitution. By Fred H. Duffy. Columbus, Ohio: American Education Press, Inc.,* 1941.

THINK TWICE

. . . before buying chairs. Consider the advantages of

IDEAL SEATING

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and you'll see why Ideal is first choice with schools and colleges everywhere.

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GRAND RAPIDS, MICHIGAN

PAGE EIGHTEEN

FOLDING BLEACHERS FAIL TO HOLD CROWD

School Board Taking Immediate Action

Too many people attended the basketball game Saturday night between [redacted] and [redacted] won by the former by a score of 38 to 33. The result was "standing room only."

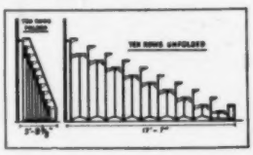
School officials attributed big crowds at recent games to the new seating comfort and convenience afforded by newly installed Horn Folding Bleachers. They said that even with the greater seating capacity afforded by the new bleachers, capacity crowds were the rule. Plans are to add more Horn units immediately to complete the bleacher installation.

Coach [redacted] also stated that he felt his team was showing big improvement because the folding bleacher installation makes possible a practical complete clearing of the gymnasium floor, even between closely spaced games, thus making better practice sessions possible.

The coach spoke highly of the "Vital Zone" Protection afforded by the Horn Bleachers in folded position.

The next home game of the [redacted] will be played next Thursday evening with the [redacted]

Detail (below) shows strength and sturdiness of Horn Construction—compactness of unit folded. Notice Vital Zone protection of sloping front.



Further reporting on the Horn Folding Bleacher Situation, company officials report it is still possible to give immediate delivery on Horn Folding Bleachers both for new construction and for gymnasium modernization.

Write Today to

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Manufacturers of the Famous Horn Folding Partitions

In Philadelphia it's the

Hotel Philadelphian

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39th and Chestnut Streets, Philadelphia, Pennsylvania

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FLOOR-MACHINE WOOLERS

FLEXIBLE, long-wearing pads — made exclusively for floor finishing and maintenance. No braiding. No tying. Use with any disc-type floor machine — for cleaning, dry-scrubbing and wax-finishing floors of all kinds.

Made of finest quality steel wool, these smooth-working Woolers cut off excess wax — harden wax film — reduce slipperiness to a minimum.

Ask your supplier — or write direct for valuable Floor Maintenance Bulletin.

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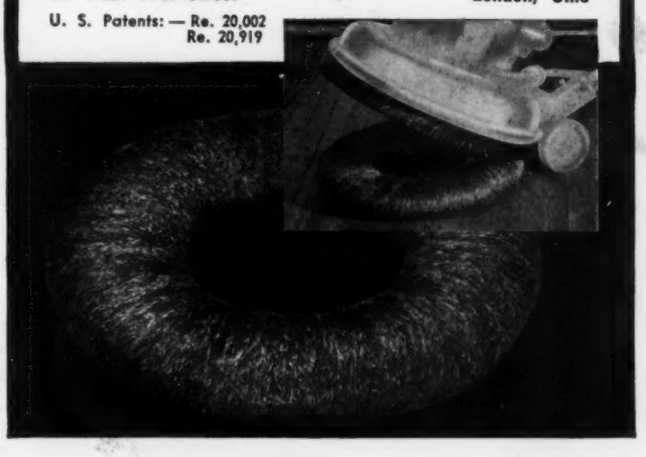


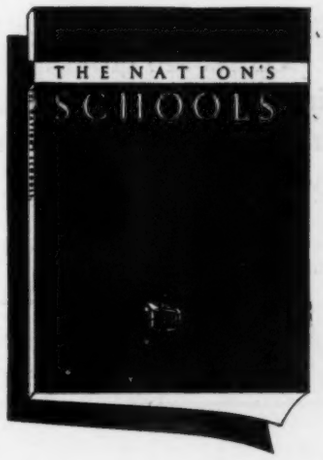
Pre-Primary Portfolio
ART DEPARTMENT
SITES and
DESIGNED FOR POPULAR APPEAL
FINANCING OUR SCHOOLS Frank W. Hubbard and

In January: Portfolio No. 37

EVERY MONTH for the past three years, The NATION'S SCHOOLS has included, as a part of its regular service, a Special Portfolio of 16 pages or more. Each has discussed a single phase of school administrative problems. Each has presented a more thorough treatment of the subject covered than would have been possible in the regular pages of the magazine without slighting other important matters.

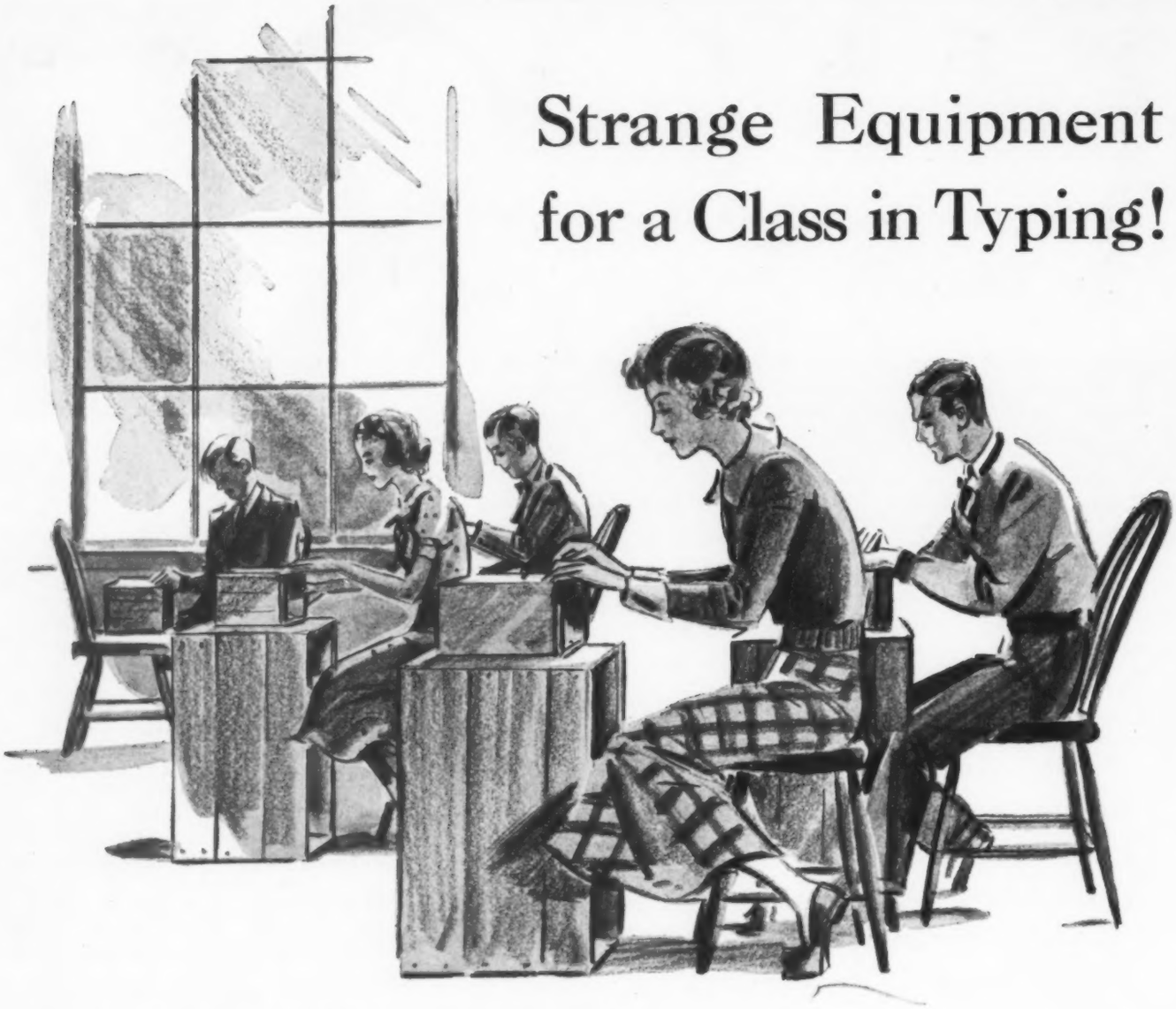
THIRTY-SIX Portfolios have met with your approval. In response to them and the editorial plan of which they are a part, more professional school administrators and more schoolhouse architects pay for and read The NATION'S SCHOOLS than subscribe to any other magazine of school administration.

NOW, IN JANUARY there will appear the 37th Portfolio, devoted to Secondary Schools. Twenty-four pages will describe, with plans, illustrations, construction details, outstanding high schools recently completed in all parts of the country. If you are planning new construction in 1942 this Portfolio will be of invaluable assistance. Even if you are not, it will provide a broad and inspiring panorama of the best in modern school building and a guide to the future. The editors are confident that this January Portfolio will surpass any of its predecessors in interest and value.



THE NATION'S SCHOOLS
Portfolio on Secondary Schools

Strange Equipment for a Class in Typing!



Typing without machines! Is it any less efficient than trying to teach Office Practice without calculating machines?

When the students go out into business, they go into machine equipped offices. Mostly, they find Monroes, for throughout the country Monroe is the most widely used calculating machine.

More and more school superintendents are becoming interested in Monroe machines, and Monroe sales to schools are growing very fast. The Monroe is so simple that the mastery of the machine comes quickly, and the student goes on in a thorough training in business mathematics.

MONROE EDUCATOR

A regular Monroe Adding-Calculator made for schools and sold to schools only, at a price to fit any budget. For information about the Educator and Monroe Office Practice Courses, get in touch with the nearest Monroe office or write to the Educational Department.

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CALCULATING MACHINE COMPANY, INC.

Educational Department: **ORANGE, NEW JERSEY**

WHAT'S NEW

Two Recent Amendments to Order P-22 Improve Priority Rating of School Field

School administrators who are having difficulty in obtaining material will find Priority Order P-22, amended first on October 16 and again on November 10 by the priorities division of the Office of Production Management, helpful in most cases.

This order grants an A-10 priority rating for maintenance, repair and operating supplies and material for educational institutions, hospitals, sanatoriums and charitable institutions, as well as for many commercial enterprises.

No official interpretation has been made but the wording of P-22 seems clearly to indicate that it can be used by schools to obtain replacement of such items of equipment as the following typical examples:

Chalkboards.

Lockers and storage equipment.

School desks and all types of public seating, including auditorium seats, folding chairs, tablet arm chairs, teachers' desks and other necessary school furniture.

Health and physical training equipment.

Heating, ventilating and plumbing materials.

Window shades.

No priority is to be sought or will be granted on these items of equipment except to replace such equipment as is beyond repair. Priority can be obtained for additions or expansions of the school property only if the school can show that it is serving a sufficiently increased number of pupils to warrant such expansion.

The list of operating supplies to which schools can apply an A-10 rating under the new P-22 order is probably broad enough to include all those materials, supplies and items that are used by the administrative staff, teaching force and pupils in the process of education and the operation of the schools. These categories would include the following typical items:

Delivery of laboratory supplies and equipment to schools will be greatly facilitated by the A-5 priority rating given to manufacturers and distributors of this type of material under the new P-62 order which became effective on November 15. This order will enable them to build stocks for shipment without first obtaining priority rated orders from their customers

Art materials and supplies.
Athletic supplies.
Dictionaries.
Duplicators and supplies.
Inks and inkwells.
Maps, charts and globes.
Motion picture projectors and supplies.
Paper; paper towels.
Pencils and pencil sharpeners.
Scientific apparatus and supplies.

Maintenance materials and supplies to which P-22 is applicable should consist of janitorial products, paints, varnishes and similar items.

In order to apply the preference rating to deliveries of materials the schools should have a responsible official endorse each original and all copies of the purchase order with the following statement, which must be signed by hand:

"Material for Maintenance, Repair or Operating Supplies Rating A-10 under the Preference Rating Order P-22, as amended, with the terms of which I am familiar."

There shall be no deviation from this specific wording.

It is important that all school officials be thoroughly familiar with the provisions of this preference rating order.

It will be noted that the terminology employed in the order is that of industry rather than of the school field. It may clarify the application of the order to the needs of schools, however, if the provisions are interpreted in the light of the simple analogy of considering the school as a factory that "manufactures" an educated child, as shown in the accompanying table.

MANUFACTURING PLANT	SCHOOL
The Plant	School Building and Grounds
Management	School Administrators
Labor	Teaching Staff
Manufactured Product	Educated Child
Machine Tools	School Equipment
Operating Supplies	School Supplies
Maintenance	Maintenance or Janitorial Supplies
Repair, Maintenance and Operating Inventory	Inventory of School Supplies and Equipment for Immediate Use

Coin Book for Savings

A clever coin book designed to promote the two virtues of patriotism and thrift among school children has recently been made available on a nonprofit basis by Binney and Smith. Titled, "My Savings Book for Defense," the attractive booklet consists of arithmetic jingles that are completed by inserting the proper coin—a penny, nickel or quarter—in the right circle. The coin itself completes a picture. A penny, for example, changes a playful seal into an acrobatic seal balancing a ball on its nose. Two nickels transform a dwarf into a little man exercising the dumbbells.

In a little pocket on the last page is a stamp book that the treasury department is distributing for those who want to save toward a defense bond. Copies of the book, which costs 10 cents, may be obtained from Binney and Smith or from the local school supply dealer.—BINNEY AND SMITH COMPANY, 41 E. 42ND ST., NEW YORK, N. Y.

• *When inquiring, refer to* **NS508**

"Char-Kole" for Artists

Blacker, smoother and—a big item these days—"lots less expensive" are the descriptive terms used by Weber Costello in presenting the new "Char-Kole" sticks. Each stick is 4½ by ⅜ inches. The product is said to be ideal for sketching. —WEBER COSTELLO COMPANY, CHICAGO HEIGHTS, ILL.

• *When inquiring, refer to* **NS509**

New Electric Broiler

Visitors to the National Restaurant Show recently held in Chicago had a chef's-eye view of the advantages of broiling meat by electricity when they visited the Edison General Electric Company's booth. On display was a new unit that can be adapted to either institutional or kitchen use.

The broiler is made in sections and can be used as a single unit for counter

mounting; as a single section broiler with oven, or as a double section broiler with oven. The single and double section assemblies are most suitable for institutional use.

Broiler grids are raised or lowered by means of an operating handle at the left of the broiling compartment. The lifting mechanism is provided with a positive stop for locating the grid at any distance from the heating unit within a range of 6 inches.—Edison General Electric Appliance Company, 5600 W. Taylor St., Chicago, Ill.

• *When inquiring, refer to* **NS510**

Air Conditioning Controlled

How to take the "clamminess" out of air conditioning is a problem that engineers of the Surface Combustion Corporation have solved with the new Kathabar comfort atmosphere, the manufacturer states. The unit, which automatically controls the humidity, consists of two major parts: the contactor and the regenerator.

The contactor, which is the humidifying or dehumidifying unit, is placed on the roof or at a conveniently located air intake. Single units or batteries provide the quantity of air desired. The regenerator cleanses, reclaims and recirculates the air by means of Kathene liquid, the temperature of which governs the humidification or dehumidification of the air.

The Kathabar system is said to be simple and accurate in operation and works automatically once it has been set.—Surface Combustion Corporation, Toledo, Ohio.

• *When inquiring, refer to* **NS511**

Adjustable Laboratory Chairs

Tall pupils who sit with their knees up under their chins and short ones whose feet dangle inches above the floor will welcome news of the Kewaunee automatic adjustable stools and chairs that can be adjusted "in a split second" to any height. The automatic adjusting and locking device works on the same principle as a bicycle coaster brake; when pressure is applied it locks.

To increase the height of the chair or stool, the user simply lifts the seat as far as desired and then stops. To lower it, the seat is raised above the extreme seating height and allowed to drop all the

way down, then gradually lifted upward until the desired height is attained. The seat locks only on the upward movement. The locking device is said to withstand many times the load or strain that can be put on it in practical use.

The back rest of the chair pivots on flexible supports that accommodate the shifting of the body. A simple device permits the back rest to be adjusted four inches up or down.—Kewaunee Mfg. Co., 722 S. Center St., Adrian, Mich.

• *When inquiring, refer to* **NS512**

Hydrated Lime

A cure for falling plaster is announced by U. S. Gypsum Company with the introduction of a new type of hydrated lime. The material was developed to overcome an epidemic of falling plaster that was caused by unhydrated magnesia in the finishing lime and is said to be the first lime to meet the new federal specifications written to eliminate this trouble.

The outstanding characteristic of the product is the fact that it eliminates the necessity for soaking. It can be dumped into the water in the mixing box, given fifteen or twenty minutes to absorb water and used immediately after mixing.

No change in gauging procedure or quantities is required with the new lime. One part of dry gauging plaster is added to three parts of the hydrated finishing lime putty. The new lime is said to be especially valuable for patching jobs, which can be accomplished without the usual delay.—United States Gypsum Company, Chicago, Ill.

• *When inquiring, refer to* **NS514**

Plastic Movie Take-Up Reel

The parade of plastics has recently been augmented by a new plastic movie take-up reel to replace the metal variety. The new reel is designed for unwinding and rewinding 8 mm. films for small projectors and is made in two sizes, *i.e.* for capacities of 200 and of 300 feet of film.

Advantages claimed for the reel include durability—it is made in one piece and nothing can get out of order—and lightness, which eliminates drag on

springs and motor. Three slots are provided in the hub for insertion in the conventional threading. An easily read, distinctly etched scale on one of the spokes shows the length of the film on

the reel at any given point.—American Molded Products Corporation, 1753 N. Honore St., Chicago, Ill.

• *When inquiring, refer to* **NS515**

Drawer Inserts for Storage

Designed originally for factories working on two or three shifts, the new two and three shift drawer inserts for the storage of tools and personal belongings

produced by Lyon Metal Products are equally adaptable to schools where the shops are occupied by several classes each day. The units can be furnished on work benches, tool stands, shop desks and under counters. Drawers feature easy sliding and flat key locks.—Lyon Metal Products, Inc., 3148 Clark St., Aurora, Ill.

• *When inquiring, refer to* **NS516**

Electric Drain Cleaner

One of those "dirty jobs" that is usually put off as long as possible is cleaning drains. Good news for the custodian, who is usually responsible for the task, is the advent of the Niard

electric drain cleaning machine, which eliminates the unpleasantness. The unit is completely enclosed to prevent the spreading of germ-infested muck on floors and walls.

Flexible steel cutting blades at the end of coil spring cables rotate at high speed to remove lime, grease, scale and other matter found in drains and pipes. Each machine is equipped with two cables, one, ¼ inch in diameter for small lines, and the other, 5/16 inch for larger lines. The flexible blades go easily through small clean-out openings and expand to the larger lines as they go.—Roto Rooter Corporation, 2302 University Ave., Des Moines, Iowa.

• *When inquiring, refer to* **NS517**

Perforated Roofing

The more holes, the better the roof is the theory proved by Johns-Manville research engineers in presenting the new perforated asbestos felt roofing. The material is perforated with tiny pinholes, spaced ½ inch apart, which permit air bubbles to escape and, thus, according to the manufacturer, reduce the hazard of blistering to a minimum. The tiny perforations open upward and are completely sealed with hot, waterproofing asphalt when the felt is laid and "broomed" in.

The material is also said to possess the advantages found in other Johns-Manville roofing products, *i.e.* it is fireproof, rotproof and easy to keep in good repair. —Johns-Manville, 22 E. 40th St., New York, N. Y.

• *When inquiring, refer to* **NS518**

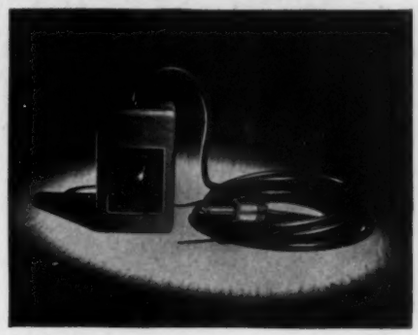
Shaker Tops

They look like glass but they aren't, which is a definite advantage of Chelsea salt and pepper shaker tops, according to the manufacturer. The tops are made of light, clear material that does not crack or chip. They can be washed in any mechanical dishwashing machine and will withstand temperatures as high as 190° F. Sizes range from 22 mm. inside measurement to 35 mm.—Chelsea Products, 281 Eleventh Ave., New York, N. Y.

• *When inquiring, refer to* **NS519**

Remote Volume Control

By way of making Filmosound projectors more valuable as teaching aids, Bell and Howell, the manufacturer, has added a new remote volume control that



can be used on all types of projectors, including new units and those that are already in service.

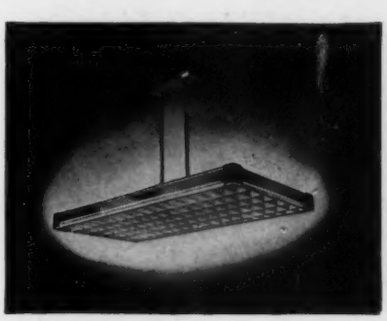
With the new device, the teacher can control the sound volume even though he is at a considerable distance from the projector and can monitor the volume of the sound film from any place in the auditorium. In addition, it is claimed that the teacher can compensate for variations in recorded sound levels when various short subjects and reels are spliced onto one large reel.

Extension cables to 90 feet can be connected without alteration of the remote control unit. Longer cables are available but will necessitate changes in the control unit. — Bell and Howell Company, 1801 Larchmont Ave., Chicago, Ill.

• *When inquiring, refer to* **NS520**

Fluorescent "Skylighting"

The skylighting effect, so much sought after by artists who know their lighting, is achieved in the new "Ace" fluorescent light marketed by Wakefield Brass Company. The unit, constructed of satin cadmium with baked white enamel finish, directs approximately 90 per cent of the light downward. Adequate louvers



prevent a direct view of the lamps. Maintenance cost is said to be low because the important reflecting surfaces face downward. The lamps can be replaced easily by lowering the hinged louvers.—F. W. Wakefield Brass Company, Vermilion, Ohio.

• *When inquiring, refer to* **NS521**

NEW LITERATURE

Automatic Cashier

One key by one finger in one second is the way the automatic change maker, manufactured by BRANDT AUTOMATIC CASHIER COMPANY, WATERTOWN, WIS., saves time and money for lunchroom operators, according to a folder published by the organization. The folder describes the operation of the machine and offers suggestions for the correct procedure for auditing receipts.

• *When inquiring, refer to* **NS522**

8 and 16 mm. Projectors

General fundamental features and all accessories pertaining to the line of 8 and 16 mm. silent and sound motion picture projectors manufactured by AMPRO CORPORATION, 2839 N. WESTERN AVE., CHICAGO, ILL., are pictorially displayed in a 16 page catalog that has recently been released.

• *When inquiring, refer to* **NS523**

New Designs in Seating Equipment

Just off the press comes an illustrated folder from IDEAL SEATING COMPANY, GRAND RAPIDS, MICH., to describe several new designs in chairs for all types of public seating. Fully upholstered chairs, veneer chairs, arm chairs and stadium seating are included in the folder and the special features of each type are fully described.

• *When inquiring, refer to* **NS524**

Plastic Finishing Material

Solid colors, mottled effects and inlays to meet all needs are shown in a color chart that comprises two pages of a recent booklet published by FORMICA INSULATION CO., CINCINNATI, OHIO, makers of Formica finishing material. Some of the innumerable uses for the material and construction details are also featured.

• *When inquiring, refer to* **NS525**

Lantern Slide Cabinet

For those who have a limited collection of slides MULTIPLEX DISPLAY FIXTURE CO., 910-920 N. TENTH ST., ST. LOUIS, MO., has designed an all-steel cabinet for keeping slides compactly assembled and properly arranged for quick reference. The cabinet is described in a special catalog that will be sent on request.

• *When inquiring, refer to* **NS526**

Factors in Good Dishwashing

CALGON, INC., 300 ROSS ST., PITTSBURGH, PA., announces a series of articles on the five factors of good dishwashing. The factors in question are: (1) a simple knowledge of water and cleaning fundamentals; (2) an efficient dishwashing machine in good working order; (3) a compound that provides control of water hardness, as well as thorough cleaning; (4) a washing method that permits machine

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NOTE:

To get further information conveniently, refer to products by key numbers. Each product or new literature item in the What's New section has a key number. For key of products described in advertisements use key numbers assigned to advertisers as listed in the adjacent advertisers' index. These key numbers should be used when writing manufacturers direct or when using this self addressed mailer which requires no postage.

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CHICAGO, ILL.

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and compound both to work at peak efficiency, and (5) a personnel trained to use these tools to best advantage. A complete set of the articles will be sent upon request.

• *When inquiring, refer to* **NS527**

Heating Pumps

Heating economy is offered by the HOFFMAN SPECIALTY CO., INC., WATERBURY, CONN., in the heating pumps displayed in a recently published catalog. Construction features, capacities and engineering data for return line vacuum pumps, condensation pumps and automatic "make-up" water units for use with various types of condensation pumps are set forth in the booklet.

• *When inquiring, refer to* **NS528**

Arctic Daylight

The theme for better fluorescent lighting, according to EDWIN F. GUTH COMPANY, 2615 WASHINGTON AVE., ST. LOUIS, MO., is "arctic daylight," described as cool, brilliant, nonglaring and shadowless. Catalog No. 38 includes data and photographs of the up-to-date fluorescent line manufactured by the Guth company.

• *When inquiring, refer to* **NS529**

Double-Value Insulation

The "whys and wherefores" of insulation are thoroughly analyzed in a new 20 page booklet in color recently published by WOOD CONVERSION COMPANY, ST. PAUL, MINN., describing double value, balsam-wool sealed insulation. Chapter headings in the brochure include such titles as "Things You Should Know About Insulation"; "Condensation—Its Cause and Cure," and "Questions and Answers Regarding Insulation."

• *When inquiring, refer to* **NS530**

How to Be a Cartoonist

"Pen Tips on Cartooning," a booklet published by C. HOWARD HUNT PEN COMPANY, CAMDEN, N. J., presents the fundamentals of cartooning. Tips are offered on the technic of pen control, drawing facial expressions, depicting action, light and shadow, perspective and composition. (25 cents per copy.)

• *When inquiring, refer to* **NS531**

To Promote Better Food Habits

AMERICAN CAN COMPANY, 230 PARK AVE., NEW YORK, N. Y., offers assistance to dietitians who are trying to improve American eating habits in a booklet entitled "Help Make America Strong." The booklet lists the essentials for a balanced diet, the essential food elements and a group of balanced menus for every season of the year.

• *When inquiring, refer to* **NS532**

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